



A Weekly Journal of the Chemical and Drug Trades
and of
British Pharmacists throughout the Empire.
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The CHEMIST AND DRUGGIST is the leading journal addressing the chemical and drug trades of the British Empire. It is adopted as an official journal by nineteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and its paid-in-advance circulation in Great Britain and all Countries having business relations with the British Empire is intrinsically and numerically unique.

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THE CHEMISTS' REFERENCE-BOOK.

Manufacturers and others who have specialities to place before those connected with the drug, chemical, and allied trades are reminded that THE CHEMIST AND DRUGGISTS' DIARY for 1911 will be published early in November. One or two points in connection with the Diary are worth noting:

1. It is the recognised reference book throughout the year for chemists all over the British Empire.
2. It contains general, legal, and technical information of the highest value to all sections of the trade.
3. It is handsomely bound and a convenient size for the desk.
4. It contains a useful and comprehensive Buyers' Guide.

These are only four of many features which make the Diary a work that is constantly being referred to by buyers, and thus it is invaluable to advertisers. The Publisher has prepared an illustrated descriptive circular containing facsimile pages from last year's Diary, and he will be pleased to send a copy to anyone who writes for it to 42 Cannon Street, London, E.C.

Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

Fifteen formulæ for boot-dressings are printed on p. 56.

Some practical hints on preparing window-tickets are given on p. 44.

The question of the identity of the caryophyllene which is said to be a constituent of essential oil of copaiba receives attention on p. 52.

The methods that are official in the Swiss and Italian Pharmacopœias for sterilising solutions are given on p. 55. These form a useful guide to dispensing-chemists.

Some notes on medical matters on p. 53 refer to the sour-milk cure, the treatment of whooping-cough and morphomania, and give details of the use of alcohol as an injection in neuralgia, and as an inhalation along with oxygen.

The correspondence this week deals with the early use of cocaine in dentistry, chemists' combines, and chemists' hours. Mr. Parry also writes objecting to the unauthorised use of his name by those who guarantee otto of rose which he has never seen (p. 61).

To enable a person to tell the character of another person from his teeth is the object of a note on p. 55. It is given along with a note on changes that may be produced in teeth by the action of drugs, and a good formula for cocaine injection for tooth-extraction.

A note on George Baker, an Elizabethan surgeon, will interest those of our readers who like antiquarian matters (p. 54). "X-rayser II." also deals with the inventor of Lockyer's pills, and Mr. Ashton's reading of the problem in Dr. Hall's prescription, to which reference was made the week before last (p. 47).

The Week's News.

A list of firms who are to exhibit in the reconstructed British Section of the Brussels Exhibition is given on p. 39.

A man who put up "Becham's pills" has been fined for infringing the trade-mark of Messrs. Beecham, St. Helens (p. 40).

The Pharmaceutical Society of Ireland have successfully prosecuted a registered druggist for dispensing medical prescriptions (p. 40).

The District Coroner for Waterloo told a chemist that the Lancashire County Council will only sanction 1s. 6d. as a fee for a witness in the Coroner's Court (p. 35).

Mr. Lionel Newbery died on August 22. He has been connected with Messrs. Francis Newbery & Sons all his life. His portrait and a biography are given on p. 42.

The exhibition of the Royal Photographic Society is being held at the Gallery of the Royal Society of Painters in Water Colour in Pall Mall East. There is not much there to attract a large gathering (p. 34).

Chemists who think that their services should be appreciated in the Territorial Army as dispensers will not get much encouragement, from what some Army surgeons said at the British Medical Association meeting (p. 51).

We extract some interesting matter from the report of the Government Laboratory's chemist. The use of duty-free spirit in pharmaceutical operations is increasing, as well as the exportation under drawback of galenicals (p. 48).

There is an impression that the Shops (No. 2) Bill exempts one-man shops from its operations. We show that this is not so on p. 51, and also note that it is the intention of the Government to push the Bill forward as soon as Parliament meets.

Trade and Market Matters.

Negotiations have been practically completed between the Saccharin Corporation, Ltd., and the National Union of Mineral-waters Manufacturers' Associations, whereby under certain conditions a substantial reduction is made in the price of saccharin (p. 58).

The chief market alterations include a further advance in cream of tartar, tartaric acid, coriander-seed, linseed, chamomiles, and castor oil. Articles which are cheaper to buy comprise citric acid and quicksilver (seconds). At the auctions the chief features were the exorbitant rates paid for asafetida and the higher prices for Siam benzoin (p. 57).

B

English and Welsh News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Brevities.

Plans have been passed of new business premises in North Street, Taunton, for Mr. W. H. Maunder, Ph.C.

The Bradford Chemists' Association hold their first meeting of the session at the Royal Hotel on September 5, at 9 P.M.

Mr. Charles Henry Holmes, of the Woodbine Nursery, Padiham Road, Burnley (Lancs), has applied to the Town Council for a poison-licence under the Poisons and Pharmacy Act.

A fire occurred on August 19 in the warehouse in the rear of the shop of Mr. W. H. Bowling, chemist and druggist, Laws Street, Pembroke Dock. The building was burnt out.

The Ashby-de-la-Zouch Guardians have placed a contract with Messrs. Hooper & Co. for two water-beds (4 in. by 36 in.), at 3*l.* 10*s.* each, and three rubber air-cushions (20 in.), at 12*s.* 6*d.* each.

Dr. A. S. Gubb, M.D., Aix-les-Bains, Savoie, has written to "The Times" calling attention to the lack of a decent isolation hospital at Naples. He gives some unsavoury details of the way a patient was treated who had the misfortune to contract varioloid.

The Board of Agriculture and Fisheries are reminding growers of potatoes that it is their duty under the Destructive Insects and Pests Order of 1910 to report to the Board all outbreaks of wart disease, otherwise known as black scab of potatoes, cauliflower disease, "fungus," etc., in counties in which no officer has as yet been appointed by the local authority to receive reports. The penalty for neglecting to report these diseases is 10*l.*

A new chemical wing of the Bristol University will be available at the beginning of October, but the formal opening will not take place until a later date. The wing is a distinct acquisition from an architectural point of view, the design being in keeping with the older buildings of the institution. There are thirty rooms devoted to chemistry, including twelve experimental laboratories with over 200 working places. Facilities have been provided for the study of metallurgy and electro-metallurgy. On the other side of the building is the physiological department, where separate laboratories for histology, chemical physiology, and experimental physiology have been provided.

Municipal Disinfectants.

The reports of the various medical officers of the municipal boroughs in London refer to the quantities of disinfectants employed during the year.

The medical officer of health for Kensington in his annual report describes the methods by which bedding and rooms are disinfected, the former by steam, the latter by formaldehyde vapour. Rooms vacated by consumptive persons are first sprayed with $\frac{1}{2}$ per cent. solution of formic aldehyde (formalin 2 oz. to 1 gal. of water), and then sealed and fumigated with formalin vapour.

The medical officer of health for Paddington says in his annual report that the popular use of disinfectants is held to be of little value and far less efficient than "domestic cleansing," hence the distribution of disinfectants by his department has for some years been of insignificant dimensions. To encourage cleanliness, small quantities of chloride of lime and a fair amount of carbolic soap are issued.

The medical officer of health of Woolwich in his annual report states that the disinfectants used during the year were as follows: Corrosive sublimate, sulphur and formalin tablets (for fumigation), formaldehyde (for spraying and disinfecting books and for use in the mortuary), cyllin (for sputa in phthisis), permanganate of potash, Jeyes' corporation fluid (for dust-pails), and chloride of lime (for offal tins).

The medical officer of health for Islington in his annual report states that the total cost of disinfectants during the twelve months was 38*l.* 12*s.*, a small sum compared with the size of the borough or with the amounts paid in years

gone by. This is in consequence of the opinion formed in 1896 that nearly all the disinfectants distributed were used in a wasteful manner and were little or no use in the prevention of infection, because they were used unscientifically and ignorantly. By the curtailment of the supply of disinfectants the borough saves about 1,300*l.* per annum.

Analysts' Reports.

The Deptford analyst last year examined, among others, the following samples, all proving satisfactory: Arrowroot, 5; vinegar, 1; glycerin, 2; castor oil, 2.

In Hampstead last year 1 sample of glycerin, 2 samples of citrate of magnesia, and 3 samples of olive oil were analysed. All were found to be genuine.

In Paddington last year the following samples were analysed: Vinegar, 15; sal volatile, 10; ammoniated tincture of quinine, 6. All were returned as genuine.

The analyst for Croydon last year examined the following samples: Citric acid, 4; tartaric acid, 4; cream of tartar, 4; Epsom salts, 2; vinegar, 1; citrate of soda, 1. All were found to be genuine.

The quarterly report of the public analyst for Monmouthshire (Mr. Thompson) states that samples of flowers of sulphur, compound liquorice powder, and camphorated oil were examined, and all proved genuine.

Among the samples examined by the Southwark analyst during the past year were arrowroot, 3; orange wine, 5; "Wincarnis," 1; black-currant wine, 2; sarsaparilla wine, 2; quinine wine, 1; lime-juice cordial, 2; lemonade powder, 1; borax, 2; linseed oil, 4; olive oil, 4; camphorated oil, 2; eucalyptus oil, 2; ground alum, 1; glycerin, 3; Gregory's powder, 2; milk of sulphur, 2; tartaric acid, 3; purified cream of tartar, 1; citrate of magnesia, 2; cream of tartar, 1; liquorice powder, 4; boracic acid, 2; "Ko Ko" powder, 1; quinine tonic, 1; sarsaparilla, 1; ammoniated tincture of quinine, 1; sulphate of quinine, 3. Of these the samples of lime-juice cordial were returned as adulterated.

In Islington the analyst's report states that seventy-eight samples of drugs were analysed, as follows: Oil of eucalyptus, 7; compound liquorice powder, 7; compound syrup of hypophosphites, 1; Bland's pills, 7; cream of tartar, 7; pil. aloes et ferri, 7; glycerin, 7; prescriptions, 14; lime-water, 14; fluid magnesia, 7. The following are stated to have been adulterated: Fluid magnesia, 22 per cent. of magnesia deficient (vendor cautioned); lime-water (1), 92 per cent. of lime deficient (vendor fined 4*l.*, and 12*s.* 6*d.* costs); (2) 21 per cent. of lime deficient (vendor cautioned); (3) 15 per cent. of lime deficient (vendor cautioned); Bland's pills, double strength in iron, but pill half size (no proceedings); compound syrup of hypophosphites, iron deficient (no proceedings, as there was not sufficient quantity of the sample to ensure a proper analysis); glycerin, 62.9 per cent. of invert sugar and 37.1 per cent. of water (vendor ordered to pay 12*s.* 6*d.* costs).

Royal Photographic Society's Exhibition.

The fifty-fifth annual exhibition of the Royal Photographic Society is being held in the Gallery of the Royal Society of Painters in Water Colour, 5A Pall Mall East, London, S.W., and remains open till September 16. There is no exhibition of apparatus this year owing to the confined space at the disposal of the Society. The pictures are arranged in the principal gallery, and in two smaller rooms on the next floor, these last-named being devoted to the section on natural history photographs and the scientific applications of photography. The pictorial section contains 211 photographs, the bromoil and the oil process being the favourite media for translating the artistic longing into being. Bromide and platinum are the next two processes most favoured. In one corner there are five photographs in oil processes in which colours are employed, but it is difficult to find out how much of the picture is due to the artist, and how much to the photographer. There is a good show of autochrome pictures, and a few coloured plates by the newly introduced Dufay dioptrichrome process and Sanger Shepherd method. The natural history photographs are equal to any that have been shown at previous exhibitions; in the adjoining room are some excellent radiographs. Lantern lectures are given on four evenings each week. On August 24 Mr.

A. Barton Kent lectured on "The All-Red Route Round the World: A Tour of 36,000 Miles Through British Territory."

Chemists' Fees as Witnesses.

Mr. D. Badcock, Ph.C., 78 St. John's Road, Waterloo, Liverpool, on August 22 gave evidence in a Coroner's inquiry into a case of poisoning conducted by Mr. S. Brighouse (District Coroner). At the conclusion the Coroner expressed his regret to Mr. Badcock that he could not allow him anything above the ordinary witness's expenses. The Lancashire County Council, he said, has made a scale of allowances to witnesses without respect to their rank or position in life, excepting medical men. Not long ago he held an inquest at West Derby, and allowed a chemist 7s. 6d. expenses, which he thought reasonable. The County Council, however, would only sanction 1s. 6d., with 6d. for tram-fares. The result was that he (the Coroner) was surcharged 5s. 6d. He mentioned this circumstance because he thought it was a gross scandal that a man in a position like Mr. Badcock should be called away from his business to give evidence before a jury for the sum of a shilling. He would continue to call attention to the matter until the County Council makes a fresh scale.

Kents' "Annual."

The annual beanfeast of Messrs. G. B. Kent & Sons, Ltd., was held on August 20, when about 600 of the employés of the Farringdon Road, Victoria Park, and Apsley Works visited the Japan-British Exhibition, where an enjoyable day was spent. Mr. A. Barton Kent presided at the dinner in the Banqueting Hall over a company of about 250, other arrangements having been made for the ladies. After the meal the firm's health was proposed by Mr. F. N. Martinez, the West Indian representative of the company, and Mr. Ernest N. Kent, who responded, alluded to the presence of his son, Mr. Humphrey Kent, who was about to become a member of the firm. Mr. A. Barton Kent proposed the toast of "The Visitors," and mentioned that the company's factory in Melbourne was in a flourishing condition. Messrs. Kent, he said, decided to establish works in the Commonwealth in consequence of the high protective duty placed on the import of brushes, and the men who had been sent from this country to make brushes had succeeded in upholding the reputation of Kent's "Best British Brushes." He paid a tribute to Mr. E. H. Wilcox, the chief London representative of the firm, who was about to retire after forty-three years' service. The toast having been responded to, the party adjourned to the Stadium, where the cricket match between teams captained by Mr. C. F. Barrett (a director of the company) and Mr. E. N. Kent was resumed. At the conclusion all the members of the party, including the ladies, had tea together.

Shop Scenes.

On August 19 a man named Jackson entered the shop at Bedford Street, Plymouth, belonging to the Timothy White Co., Ltd., and commenced smashing articles. He was identified as a discharged lunatic asylum patient, and at the police court the next day it was directed that he be removed to the workhouse pending his confinement in an asylum.

On August 20 an Irish labourer named Ryan entered the shop of Mr. Wm. Tudor, chemist and druggist, Brecon, and became abusive, eventually striking Mr. Tudor with a handkerchief containing slices of bread-and-butter. Assistance being at hand, the man was ejected and taken into custody. He was brought before the Magistrates on August 22 and fined 1l. and costs, or one month's hard labour.

In the Courts.

Samson H. Wade, Mile End Road, London, E., who described himself as a canine surgeon, was at Old Street Police Court on August 24 fined 2s., and 4s. costs.

At the Guildhall Police Court on August 18, Charles Henry Oliver, clerk in the service of Arnold & Sons, surgical-instrument makers, Giltspur Street, London, E.C., was remanded on a charge of stealing a number of postal orders from letters belonging to his employers.

At the City of London Sessions on August 24, George Roberts (38) pleaded guilty to stealing letters containing a cheque for 10s. and postal order for 3s. 5d. from the

premises of the General Apothecaries' Company, Ltd., Berners Street, Oxford Street, W. He was found to be an old offender, and was sentenced to twenty-three months' imprisonment, with hard labour.

Mr. W. O. Smith, chemist, 32 West Street, Fareham, was again before the Magistrates on August 22 on a charge of supplying noxious drugs knowing that they were intended to be used for an unlawful purpose. Mr. Barnes, who represented Mr. Smith, applied for a further adjournment for the purpose of instructing counsel, who cannot be reached quickly owing to the vacation. An adjournment was granted till August 27, the accused being allowed out on the same bail as before.

A man named Perris or Simpson was on August 24 committed for trial at Marylebone Police Court on a charge of shooting a fellow-passenger, in a Metropolitan Railway carriage, with intent to murder. When prisoner was searched after the occurrence there was found upon him a bottle of chloroform, regarding which Mr. Frederick Brook Webb, manager to Messrs. Stephens & Co., chemists, High Street, Borough, stated that on August 9 the prisoner called at the shop and asked for twopennyworth of chloroform. Asked what it was wanted for, prisoner said it was required to make into a liniment. Witness supplied him with two drachms, for which he paid 2d. Mr. Webb added that he had previously supplied him with chloroform, but not with laudanum.

Cricket.

Wholesale Chemists and Druggists' League.—On August 20, at Crofton Park, the British Drug Houses C.C. beat Burgoyne's by 133 for six wickets, against 51. On the same date Stevenson & Howell C.C. played Potter & Clarke C.C., the former being victorious by 104 runs for six wickets, against 47.

Leicester Pharmacy Athletic Club.—On August 11 the L.P.A.C. played the Y.M.C.A. at the Old County Ground, Aylestone Park. Pharmacy had first innings, and scored 164, of which F. Fry made 66 by some brilliant hitting. To this total the Y.M.C.A. responded with 78, thus losing to the men of drugs by 86. On August 18 the opponents were the third team of the Banks C.C., to whom Pharmacy gave such a drubbing earlier in the season. This time the Banks turned out very much stronger, and made 107. Pharmacy, however, topped this score by 30, their aggregate being 137, of which F. Fry again was to the fore with 37.

Poisoning Cases.

WE record six cases of suicide by poisoning which have occurred since our last issue:

Acetic Acid.—Gertrude Ricketts, wife of a Swanmore market gardener, poisoned herself with glacial acetic acid. She is stated to have taken an ounce of the acid.

Carbolic Acid.—An inquest was held at Waterloo, near Liverpool, on the body of Catherine Chisnall (20), domestic servant, who poisoned herself with carbolic acid, three-pennyworth of which she had obtained from the shop of Mr. Daniel Badcock, Ph.C.

Hydrocyanic Acid was taken by Alfred Hodgkinson (45), a Darwin overlooker. Deceased obtained the poison from Mr. Ewart Jepson, on the pretence that it was required for poisoning a bull-mastiff.

Red Precipitate caused the death of Catherine Davies (21), a newly married Leeds woman. She had never lived with her husband, and in her depression took poison. The doctor said he believed there were only some half-dozen cases on record of people having taken their lives by its use. A chemist in Quarry Hill, who was said to have supplied deceased with the powder, denied having done so, though he told him (the doctor) that it was not scheduled as a poison.

Spirit of Salt was the poison used by Thomas Hilton (64), a plumber, who died in Oldham Infirmary. He had worried about his wife, who died some time ago.

Veronal.—An inquest was held on August 20 at Northampton on the body of Miss Margaret Brown, an inmate of St. Andrew's Hospital (Asylum), who died as a result of veronal poisoning. She was discovered in a state of coma, from which she did not recover, and in her room were found several packets of veronal, a letter from a Colwyn Bay chemist, who had been supplying the deceased lady with veronal-tablets, and several newspaper cuttings relating to cases of veronal poisoning. A verdict of suicide while temporarily insane was returned.

Irish News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Brevities.

Mr. J. Fleming, Ph.C., has opened a new Medical Hall in Main Street, Moate, co. Westmeath.

Dr. W. Vincent Johnston, Ph.C., proprietor of the Ranelagh Pharmacy, Dublin, has started a surgery in connection with his Medical Hall.

A branch of the Irish Chemists' Assistants' Association has been formed at Waterford. Meetings of assistants have been held at the Granville Hotel.

Mr. W. B. Harrington, F.C.S., of Messrs. Harrington & Sons, Cork, has been appointed Hon. Secretary of the Irish Industrial Development Association of that city.

Sir John William Moore, M.D., Dublin, the Government Visitor to the Pharmaceutical Society of Ireland, has been appointed a Deputy-Lieutenant for the county of Dublin.

A good photograph of Mr. Jas. Tate's Medical Hall, 7 and 9 Royal Avenue, Belfast, is reproduced in the "Christian Advocate" for last week. Mr. Tate specialises in Irish scents.

The position of analyst to the Tyrone County Council, to which is attached a salary of 150*l.* a year and the fees under the Fertilisers and Feeding Stuffs Act, is to be filled on September 2. Applications for the post must be made before August 31.

The Library and Technical Committee of the Belfast Corporation have received a number of applications for the position of Professor of Pure and Applied Chemistry at the Technical Institute. The selection is to be made from ten candidates whose qualifications have been considered by the Principal of the Institute.

The Sale of Ether.

Mr. A. T. Ferrall, Registrar of the Pharmaceutical Society of Ireland, writing to the "Irish Times" in regard to the prevalence of ether-drinking, states:

A serious difficulty in putting down illegal sales of ether is that, although the police may find large quantities on the premises of unregistered persons, the poisons and pharmacy laws (unlike the Licensing Acts) require proof of sale before a conviction can be obtained. It is strongly felt that the Pharmaceutical Society should not have to bear the costs of prosecutions for illegal sales of poisons, but that, in the public interest, such ought to be borne by the Government. As remarked by the Society's solicitor in the recent prosecution at Donadea, co. Kildare, the expenses of such largely exceed the amount of fines and costs recovered.

Guardians Affairs.

The Cavan Board of Guardians last week received a letter from the Local Government Board, in which exception was taken to an order for 7 lb. extractum ergotæ liquidum ordered by Dr. Soraghan, of the Belturbet district. Dr. Soraghan informed the Local Government Board that "the extract of ergot was ordered in mistake for the extract of cascara sagrada. As the article came forward he did not know how to act other than use it. Although the quantity was large, he found it useful for cases then and since under treatment in the district." He regretted the error. The Board request that the doctor exercise more care in future when ordering medicine.

At the meeting of the Cork Board of Guardians the Local Government Board intimated that they must decline to sanction the acceptance of the tender of the Cork Chemical and Drug Co. for the supply of medicines to the Union; that recoupment cannot be allowed in respect to the cost of the same, and that the auditor's attention has been called to the matter. The Chairman said the Local Government Board had sent down a sealed order, and it was now a question for the Guardians to stand by their attitude and fight the Local Government Board. It was mentioned that the cost of medicines would be approximately 1,200*l.*, and that the difference between the tender accepted and the next was only about 9*l.* for the year. The matter was referred to the Board's solicitor.

Scots News.

When sending Newspapers containing Trade news to the Editor please mark the items.

Aberdeen and the North.

Three chemists' businesses in the north-east end of the city are at present in the market.

The "Free Press" contained a note regarding the work of Ucal *à propos* of the movement by local traders against co-operative societies.

On Sunday morning, August 21, the horse attached to a milk cart plunged into one of the large plate-glass windows in the shop of Mr. Robert Dufton, chemist, Loggie's Buildings, Huntly. Considerable damage was done to the goods in the window.

The premises at 470, 472, and 474 Union Street, Aberdeen, are said to have been purchased for carrying on a drug-business. The shop is situated at the west end of Union Street, at the foot of Rose Street, and is close to the businesses conducted by Messrs. Davidson & Kay, Mr. W. F. Hay, and Gordon's Drug-stores.

Edinburgh.

Business is exceedingly quiet in Edinburgh and district.

Mr. S. Graham Crowden, of the British Drug Houses, Ltd., has so far recovered from his rheumatic attack as to be able to go to a health resort in Fife.

Glasgow.

Dr. McConville, who died on August 22 at 14 Park Grove Terrace, was well known in pharmaceutical circles. He took his M.D. at St. Andrews in 1856.

The East Coast.

A case of cholera has been reported by Dr. Moir, Keltie, and prompt precautions have been taken to prevent the outbreak spreading.

Mr. R. F. Hughes, chemist and druggist, Methil, was a runner-up in the bowling competitions which were decided at Methil Green last week.

Mr. R. S. Ramsay, chemist and druggist, Bowhill, intends closing his Aucterderran branch at an early date. Mr. Ramsay has just been re-elected a director of the Cardenden Gas Company.

French News.

(From the "C. & D." Correspondent.)

SALE OF POISONS.—Veterinary surgeons in the Drôme and Haute-Marne departments have been prosecuted for the sale of poisons. The Valence Court convicted, but the Langres Tribunal discharged the five defendants, as the actual sale (as distinguished from the fact of holding goods in stock, which was admitted) could not be proved.

SALE OF OPIUM.—The Orne Pharmacists' Association desires to petition the Minister of the Interior for the suppression of the new opium register. The General Association of French Pharmacists, however, declines to support the idea. A similar petition from the French Druggists' General Association elicited a negative reply.

ARREST OF TWO PHARMACISTS.—One of those unpleasant incidents which may follow the purchase at low prices of pharmaceutical preparations and products which have been stolen has just come to light, and M. Desportes, who owns a pharmacy at Maisons Alfort, and M. Scagliola, pharmacist at Le Perreux, together with the former's son and three men employed in wholesale pharmaceutical houses, have been arrested. Among the articles are a considerable quantity of patent medicines.

A QUESTION OF NATURALISATION.—A proposal has been made in French medical circles that it should be made compulsory for all foreign physicians practising in France to become naturalised citizens of this country. It is hardly necessary to say that a natural sequence of this suggestion is that a similar proposal may be brought forward as regards British and other foreign pharmacists established in France. Evidently every country has a perfect right within its own borders to make such rules and regulations

as may be deemed advisable, but the question of compulsory naturalisation on the part of a distinguished class of men who attend principally to the wants of visitors when out of health appears so narrow-minded that one may hope it is merely a rumour and nothing more.

PROTECTED PRICES.—The formation of a "commercial annex" of the General Association for the manufacture of proprietary goods to be sold at fully protected prices was discussed at the Nancy meeting of the General Association of French Pharmacists in 1909, and a vote obtained in favour of the principle. Difficulties have now arisen. At a recent meeting of the Association M. Fortuné brought the matter up. He said that the general working expenses of a pharmacy amount to 20 per cent., and complained that 25 per cent. profit was not enough, while the annex would make proprietary articles more numerous than ever. After a lively discussion, a vote was taken on the question submitted by M. Henry Martin: "Shall the name of the General Association of French Pharmacists be mentioned on the trade-mark of the Commercial Association and its public advertisements?" and 373 "Noes" were registered as against 292 "Ayes." This, said M. Fortuné, meant that they had "gone back" on their Nancy decision, and the matter dropped.

ASSISTANTS' HOURS.—The mass meeting of pharmacists' assistants and their supporters called for Wednesday evening of last week was postponed until the following evening, and the square in front of the Paris Stock Exchange was the final rendezvous. The authorities took precautionary measures, and a strong force of police was on foot to meet contingencies. All attempts to hold a meeting were frustrated, for the *sergents de ville* quickly dispersed the groups that tried to form, and strong patrols kept the approaches to the Stock Exchange clear. Never before had such an array of armed force been mustered against any body of pharmacists in France, and probably not elsewhere. There was a sufficient reason for these precautions, for the Union of Trades' Syndicates had called on its members to support the pharmacists' assistants in their endeavours to coerce employers into the nine o'clock closing hour. M. Péricat, of the Building Trades Federation, and M. Diem, secretary of the Pharmacists' Assistants' Syndicate, were to have been the principal speakers at the meeting, but under the watchful eye of the police they waited patiently for a favourable opportunity that proved altogether elusive. In the neighbourhood of the Exchange two or three pharmacies remained partially open after nine o'clock, and manifestations were attempted against them, but were quickly frustrated by the police. That the attempted meeting was thought to contain the elements of serious trouble was proved by the fact that the very able Prefect of Police, M. Lepine, and his principal lieutenants were themselves on the spot. No incident of serious importance occurred. There were some skirmishes between the assistants and the police, and about a dozen arrests were made during the evening. Finally, the agitators moved off to the neighbourhood of the Gare St. Lazare and made a hostile manifestation against the pharmacy on the Place du Havre. Some free fighting with the police took place here, and more arrests were made. Besides this, a delegation of assistants, headed by M. Diem, the secretary, had an interview with M. Dubois, the proprietor of the pharmacy. The upshot was that the latter declared himself ready to submit the question of nine o'clock closing to arbitration if the other pharmacists who were remaining open later also agreed to such a course. The arbitrators suggested are members of both Houses of Parliament or well-known business men, not prejudiced either way in the conflict, and who would be likely to find a solution that would serve the interests of the public and at the same time give satisfaction to the Corporation of Pharmacists. The assistants are evidently desirous of pushing their claims with all expediency, as the number of pharmacies now remaining open after nine o'clock has increased. It is of interest to record that the Paris Syndicate of Pharmacists—that is, the employers' association—has given the assistants its support and approval, so that the difficulty at present remains with the "cutting" pharmacies.

HEARD IN THE FACTORY.—Why did the "Hazel Foam"? Because it heard the ipecacuanha wine.

Our American Letter.

From an Ethical Pharmacist.

Co-operation.—Now we have another co-operative syndicate. The A.D.S. has been such a remarkable success that competition has been provoked. This time it is "The Consolidated Drug Co." of New York City, which has been organised with a capital of half a million dollars, and which asks druggists to become stockholders in the enterprise and to push the Consolidated line of family remedies at a handsome profit. The leading spirit in the enterprise is H. F. McCormick, of Chicago, who was formerly connected with the United Drug Co., manufacturers of the co-operative line of Rexall products.

Supply of Cocaine.—Nearly every State in America is provided with an anti-cocaine law. It has been found by experience, however, that this is not enough—that drug *habitues* denied the use of cocaine will turn for relief to opium, morphine, and other substances. Hence the recent decision of the Pennsylvania druggists to include these other narcotics in the anti-cocaine statute. In Ohio the law has been so amended as to include alpha and beta eucaine and alypin among its provisions. The Ohio statute has also been amended so that a conviction for the second offence will mean imprisonment for not less than one year or not more than five years in the penitentiary.

The Rubber Situation is becoming acute. The prices of syringes, rubber sundries, and the like continue to mount upward, and there seems to be no end to the movement immediately in sight. The automobile industry is developing so rapidly in the United States, and there is such an enormous demand for rubber tyres, that the conditions are not likely to improve. A 25-per-cent. advance in the price of motor-car tyres was recently made. Reports indicate that thousands of acres of rubber-trees have been planted in the East Indies, and that considerable improvement has been made in the method of exploiting the wild-rubber forests of Brazil. Some relief seems to be promised ultimately in these directions.

Passing-off Cases.—Fairchild Bros. & Foster, the manufacturers of Fairchild's essence of pepsin, have for years been bringing suits against pharmacists for dispensing or selling some other product when theirs was prescribed or called for. Two or three years ago they began suits against twenty-five or thirty chemists in Chicago. All the defendants but one promised to amend, and this one suit has been dragging through the courts ever since. It has just been decided, on appeal, against the druggist, and he is enjoined from selling any other essence of pepsin in substitution for, or imitation of, the Fairchild product. The suit was made a sort of test-case by the local Association, but it turned out differently than that organisation expected.

Food and Drugs Act.—The Federal Government is continuing its vigorous enforcement of the Food and Drugs Act. Up to date, over five hundred cases have been brought to a conclusion in the courts, and usually the Government has won. In some recent cases, however, the Government has lost, principally because its contentions were not valid, and this has caused some restrictions to be placed on Dr. H. W. Wiley, President of the Board of Food and Drug Inspection in Washington. Dr. Wiley has heretofore been the man who has initiated all prosecutions, and now it has been provided that such authority is to be passed to the solicitor of the Department of Agriculture, and that Dr. Wiley must consult him before launching any further prosecutions. Every time Dr. Wiley is hemmed about in some such manner, it of course gives great joy to his enemies throughout the country.

A.P.H.A.—At the last meeting of the A.P.H.A. in Richmond a new and enlarged committee on the pharmaceutical syllabus was appointed, there being seven members each from the A.P.H.A., the National Association of Boards of Pharmacy, and the American Conference of Pharmaceutical Faculties. The new committee has now been organised, with Professor Willis G. Gregory, of Buffalo, as President, and Henry L. Taylor, of Albany, New York, as the Secretary. Ernest O. Engstrom, Pittsfield, Mass., has been made Chairman of the Sub-committee on Chemistry; Dr. H. H. Rusby, of New York City, Chairman of the Sub-committee on Materia Medica; and Professor James H. Beal, of Scio, Ohio, Chairman of the Sub-committee on Pharmacy. During the summer the ideas of the various members of the committee of twenty-one will be co-ordinated, and it is hoped that in the autumn or winter the second edition of the syllabus will be published. The purpose of the syllabus is to outline a minimum course of study to be followed by the colleges of pharmacy in their curricula and by the State Examining Boards in their examinations. The whole scheme represents an effort to place pharmaceutical education and registration upon a more definite and uniform basis.

South African News.

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in business in British South Africa.

Cape Colony.

MEDICAL AND DENTAL LICENCES.—Upon the recommendation of the Colonial Medical Council of the province of the Cape of Good Hope, the Minister for the Interior has been pleased to issue licences, under the provisions of the Medical and Pharmacy Act, 1891 (Cape of Good Hope), authorising the undermentioned persons to practise as medical practitioners in the province of the Cape of Good Hope: Henry Eckley Herbert Oakeley, Bac. Surg. Univ. Camb., 1908; Philip Roytowski, M.B., Bac. Surg. Univ. Edin., 1910; Alexander Grahame, M.B., Bac. Surg. R. Univ. Irel., 1898; and as a dentist to practise in the province of the Cape of Good Hope: Harold David Halliday, Lic. Den. Surg., R. Coll. Surg. Eng., 1894.

Transvaal.

PERSONAL.—Mr. W. A. J. Cameron (Secretary of the Transvaal Medical Council and Pharmacy Board), who recently returned from his honeymoon in Cape Colony, was the recipient of many handsome presents from his medical and pharmaceutical friends on the occasion of his recent marriage. Among the presents were a valuable tea and coffee service given by the Medical Council, and a handsome cabinet of cutlery given by the Pharmacy Board.

CUSTOMS TARIFF INTERPRETATIONS.—The following Customs tariff interpretations are gazetted in the "S.A. Union Gazette" of July 26:

	Rates of Duty.	Rebate allowed on goods the produce or manufacture of U.K. or reciprocating Colonies.
Nitrate-of-silver crystals in 100-oz. paper packets ...	15%	3% ad val.
Stearns' wine of cod liver oil ...	25%	3% ad val.

NIGHT-SERVICE.—Messrs. Lennon, Ltd., Turner & Co., Forby & Co., T. E. Jolly & Co., and Loewenstein, Adams & Co., Ltd., all of Johannesburg, have instituted a service of night-attendance, with the object of overcoming the night-bell difficulty which has caused so much grumbling in the past. The idea is that each of the above-named firms guarantees attendance from 8 P.M. to 8 A.M. week about, which will be one week out of five for each pharmacy. Printed cards are to be hung in a conspicuous place in the windows of each of the five establishments, directing where urgent medicines are obtainable for the week, and an advertisement is to appear in the "Medical Journal" advising the doctors of the arrangement. The five firms in question are all within a short distance of one another, and the scheme only applies to the centre of Johannesburg.

INFRINGING THE MEDICAL ACT.—Before the Resident Magistrate at Wakkerstroom, Mr. Thomas Hannah, chemist and druggist, late of Natal, and now of Amersfoort, Transvaal, was charged on five counts with practising as a physician and as a chemist and druggist in the Transvaal. The proceedings lasted the whole day, and the Crown produced numerous witnesses, who stated that Mr. Hannah had in almost every case treated them in pretty much the same manner as a doctor would have treated them, although all admitted they had been charged for medicines only. A number of surgical instruments were produced in court, having been seized by the police. The accused pleaded he was justified, as, according to his interpretation of the law, there was nothing to prevent a man treating persons for complaints so long as he did not falsely and wilfully call himself either a doctor or a chemist. The accused quoted from certain statements made by the President of the General Medical Council in Great Britain, and also a decision of the House of Lords in his favour; but the Magistrate would not accept the defence, since the accused admitted that he was unregistered either as a doctor or as a chemist in the Transvaal, although he was no doubt a chemist in Natal. Accused was found guilty on all five counts, and was sentenced to pay 20*l.* on each count, or one month, making a total of 100*l.*, or five months. Notice of appeal was given.

NEW MEDICAL AND PHARMACY ACT.—At a meeting of the Transvaal Medical Council, held on July 26 at Johannesburg, the President (Dr. T. F. Davies, D.S.O.) referred to the recent Medical Conference held at Bloemfontein, at which delegates from the various S.A. provinces were present with the exception of the Cape. All the representatives of Councils came prepared with draft Acts for consideration. The O.R.C. draft was taken as the basis of discussion, and was discussed in conjunction with the drafts of the two other Colonies present. Many alterations were made in the proposals, and many resolutions were arrived at. The Conference was, however, unable to complete the business, and an adjournment was made to Johannesburg on June 6. At the adjourned Conference the Cape Medical Council delegates were able to attend. They were Drs. Murray, Beck, Wood, and Johnston. At first it did not appear as if the meeting was going to have promising results on account of friction between the various Colonies, but eventually the discussion smoothly proceeded. Everyone on either side was prepared to give and take, and resolutions were passed which Dr. Davies believed would result in a very fine Act indeed. There was no reason to believe that the results would not be accepted by the Government. Some might not be, but provision had been made in other resolutions that would be substituted. The Conference was unanimous in the adoption of its conclusions, and a document was signed by all present undertaking to support the whole of them. The present position was that the resolutions had been drafted into a rough Act, which had been sent to the Union Government, whose parliamentary draftsman would put it into shape. The Conference had officially been informed that the Government would be very glad to have the benefit of the explanations and advice of the delegates. An opportunity would also be given to consider the draft Bill in its final form. Dr. Davies concluded by expressing the belief that they might look forward to securing a workable Act which would be for the benefit of both the general public and the profession.

India and the East.

(From the "C. & D." Correspondents.)

ANTI-RINDERPEST SERUM.—Mr. P. G. Short has reported to the Perak Government that the time is ripe for the preparation of anti-rinderpest serum in the Federated Malay States, though he fears that possibly the climate is unsuitable.

COCAINE IN BURMA.—The cocaine habit was the subject of a recent report by the Commissioner of Police, Rangoon. He says the habit is growing by leaps and bounds, and that legislative action is urgently called for. "Cocaine dens," he states, "are run quite openly, and no effective action can be taken under the existing law; and owing to the drug being about one-fifth the price of opium it is within reach of the most indigent." The local Government is said to have in contemplation the enactment of certain measures which will, it is believed, have the effect of stopping the smuggling of cocaine that now goes on from passenger steamers visiting Rangoon.

QUININE IN INDIA.—An extraordinary testimony to the value of quinine treatment in connection with malaria appears in the hospital report of the United Provinces of India for last year. The malaria outbreak of 1908 was the most severe in the Provinces since 1879, and the number of patients treated in the Government Medical Institute was 1,369,583, which is equal to nearly half the total treated during the previous five years. The number treated in 1909 was 1,492,487, but whereas 1,141,079 deaths were registered during September to December 1908, the mortality during the corresponding period of 1909 was only 567,391. Colonel Manifold, I.M.S., the Inspector-General, regards the decreased mortality, notwithstanding the increase of 130,000 in the attendance at the hospitals and dispensaries, as a gratifying tribute to the success of the attempt made by the Government to combat the malaria epidemic by the issue of quinine. The public, says Colonel Manifold, are now fully alive to the value of quinine, and he looks to a further rapid diminution of mortality from malaria during this year.

Brussels Exhibition.

THE Board of Trade have decided, with the approval of the Treasury, to undertake the reconstruction of a British section in the Salle des Fêtes, which has been offered for this purpose by the Belgian authorities. A meeting of the Royal Commission was held in London on August 20, and a circular was sent out to exhibitors acquainting them of the decision to reconstruct. By Wednesday morning sufficient response had been made by exhibitors to ensure a good display being made of British goods. Showcases are being constructed in London, and will be ready for use in a few days. Offers of free conveyance of goods to Ostend have been received from the John Cockerill Co., Seraing, and the General Steam Navigation Co. The Salle des Fêtes, where the section is to be housed, is a large building near the entrance to the Exhibition. Already the rising floor has been levelled to prepare it to receive the exhibits. Mr. Keighley Snowdon, Mr. Wintour's assistant, who will be known to many of the exhibitors, is at present in London pushing forward the arrangements with exhibitors. The following is a list of those in the drug, chemical and allied trades who have already announced their intention to send goods to the Exhibition. The list is made up to Wednesday morning, and by the time this issue reaches our subscribers it will probably be much extended, as names are reaching the Board of Trade by every post:

Birmingham Dental Supply and Manufacturing Co., Ltd.	Jeyes' Sanitary Compounds Co., Ltd.
Breffit, E., & Co., Ltd.	Knight, John, Ltd.
British Aluminium Co., Ltd.	Martindale, Wm.
British Drug Houses, Ltd.	Mellin's Food, Ltd.
Brunner, Mond & Co., Ltd.	Morgan Crucible Co., Ltd.
Cambridge Scientific Instrument Co., Ltd.	Negretti & Zambra.
Cassel Cyanide Co., Ltd.	Platinotype Co.
Cerebos, Ltd.	Price's Patent Candle Co., Ltd.
Chivers & Sons, Ltd.	Reckitt & Sons, Ltd.
Cleaver, F. S., & Sons, Ltd.	Ribbon Metals Syndicate, Ltd.
Cook, Edward, & Co., Ltd.	"Sanitas" Co., Ltd.
Darton, F., & Co.	Sapon, Ltd.
Down Bros., Ltd.	Smith, T. & H., Ltd.
Fraser, W. J., & Co., Ltd.	South Metropolitan Gas Co.
Fry, J. S., & Sons, Ltd.	Spratt's Patent, Ltd.
Gas Light and Coke Co.	Stanley, W. F., & Co., Ltd.
Gosnell, John, & Co., Ltd.	Swift, Jas., & Sons, Ltd.
Gowlland, Wm., Ltd.	Tintometer, Ltd.
Idris & Co., Ltd.	United Alkali Co., Ltd.
Ilford, Ltd.	Valentine & Sons, Ltd.
Kilner Bros., Ltd.	Wellington & Ward.

Messrs. Brady & Martin, Ltd., Newcastle-on-Tyne, inform us that they will be unable to repeat the exhibit which has been destroyed, as time will not permit of its preparation. The exhibit illustrated especially development of pharmacy as practised by such a scientific authority as Dr. H. B. Brady, F.R.S., the founder of the business, and his successors. Besides a notable collection of chemical, physical, and other scientific apparatus and instruments, the destroyed exhibit contained examples of medicinal preparations made and physiologically tested on the company's own premises, with the actual sphygmographic tracings obtained in their pharmacological laboratory. It was thus possible for the jurors to check from the exhibits the accuracy of the standardisations, and this could not be achieved by bringing together now a mere "show" collection.

NAVAL RECRUITS.—Of 5,955 naval recruits examined at the Royal Navy Rendezvous during 1908-9, 632 had defective vision and 483 defective teeth.

SANDALWOOD IN CHINA.—Considerable quantities of sandalwood are used in China for industrial purposes, but supplies, which formerly came from Mysore, have of late years been obtained from Australia and Timor, where a cheaper and inferior wood is produced. This competition has grown so serious that the Indian Government has determined to recover the China market. Their agent has visited Hankow and succeeded in making satisfactory arrangements for sandalwood and other fire woods, which will in future be distributed from Hankow as the chief centre. The imports into this port in 1909 were 15,376 cwt., valued at 12,075*l.*, as compared with 12,755 cwt., valued at 10,528*l.*, in 1908.

The Passing of the Text.

[William the Porter is having his summer holiday this week; so his chronicler falls back upon a personal reminiscence. William is likely to be loquacious when he returns.]

WHO originally owned the text-card nobody knew. For ages it had hung immediately below the night-bell in the "Assistants' Chamber," yet the secret of its origin lay buried in deep obscurity. And on the particular night of which I speak—as the soft green moonlight flooded the room, intensifying its cheerless aspect a hundredfold—the text shone dully in the sombre light as it had done for years unknown—

LOVE THY NEIGHBOUR AS THYSELF.

At the further end of the room the two occupants slumbered peacefully on their hard beds. Of the second assistant, a white careworn face, which harmonised strangely with the snowy sheets, alone showed above the clothes. From the other bed the gentle mutterings of the junior broke the silence as he dreamt of the one he had left behind when he came to seek experience, and maybe a fortune, in famous "London Town."

A sudden clanging of the bell caused the junior to awake with a start.

"Now, Cranshaw, your night on," he jerked suddenly, as he slipped backwards into his former comfortable position.

"Right-oh, you needn't shout," muttered the second sleepily. "Know all about it," he continued grumblingly, as he made a hasty dive for his clothes.

"Well?" inquired the junior ten minutes later, as the shivering Cranshaw crept into the room. "What is the matter this time?"

"Bagshaw again!" growled the second sulkily.

"What! dying again? Bless me, that woman always starts dying in the middle of the night—getting quite a habit with her. What's Duncan given her this time?"

"Oh, the usual! Half-ounce at once, repeat when the Dickens you like!"

"Ugh! Good-night," gurgled the junior, as Cranshaw crept between the sheets.

"Hullo, what's that?" snorted the infuriated second a minute later, as the bell above his head began to clank noisily. "Hang it all, can't a fellow get a minute's sleep?" Hastily repeating his dressing, he hurried from the room.

The dozing junior heard his passage down the creaking stairs, and a moment later caught the sound of a slammed door and the rushing sound of footsteps along the corridor.

"Hello, Cranny! What's amiss?" he queried, as the angry face of Cranshaw appeared through the doorway.

"Amis—amis!" spluttered the furious Cranshaw. "Why, that old idiot has sent back to inquire if the bottle has to be shaken." "Ye gods!" he continued fiercely, "this is what I left a good home for—this is what I spent years and years of study and self-denial—"

His voice stopped suddenly as the familiar card caught his eye. "Love thy neighbour as thyself," he muttered mechanically. "Love Mrs. Bagshaw as—"

With a snort of rage he grabbed the offending card from the wall. Muttering softly, he tore it into a hundred pieces. "Guess I'll sleep now," he gently murmured. "Good-night, youngster."

Then all was still.

SOAP (valued at 3,350*l.*) and medicines figure in the list of foreign imports into Amoy, but a large portion of these articles are manufactured in China under foreign supervision from Chinese materials and ingredients.

TOOTH-BRUSH CLUBS exist in some London elementary schools. According to the report of Dr. James Kerr, the medical officer to the Education Committee, the head-teacher purchases a stock of tooth-brushes at 2*s.* 3*d.* per doz., and sells them on the instalment system at 2½*d.* each, the profit being used to supply brushes to those unable to pay. Halfpenny packages of precipitated chalk are also sold.

Legal Reports.

Pharmacy Act (Ireland), 1875.

ILLEGAL DISPENSING.

At the Larne (co. Antrim) Petty Sessions on August 23, four cases were heard, in which the Pharmaceutical Society summoned Frederick Thomas Smith, registered druggist, Main Street, Larne, for keeping open shop for dispensing and compounding medical prescriptions, contrary to the Pharmacy Act (Ireland), 1875, on June 23 and July 7. The Magistrates who adjudicated were: Colonel McNeill, J.P. (in the chair), Dr. Dundee, J.P., Messrs. William Holmes, R.M., Felix Mulvenna, J.P., and Bernard McCafferty, J.P.

Mr. Wm. Campbell Meeke, solicitor (of Messrs. A. & J. Robinson, Dublin), prosecuted on behalf of the Pharmaceutical Society.

Mr. James Tweed, solicitor (of Messrs. O'Rorke, McDonald & Tweed), appeared for the defence.

Mr. Meeke, in stating the case for the prosecution, said the defendant, who is a registered druggist, carried on business in Larne and also in Antrim. He explained the provision of the Pharmacy Act by which, for the public safety, dispensing is confined to pharmaceutical chemists and chemists and druggists. The registered druggist is hopelessly unqualified in any way to dispense or compound medical prescriptions. If he proceeded to compound a medical prescription he was doing something which might, owing to a mistake arising from his ignorance, lead to the taking of human life. The facts of the present case are very simple and short. The defendant had persistently and constantly for years compounded and dispensed medical prescriptions. The Society had been unable to bring the offence home to him, but there were constant complaints. Eventually on June 23 the Society's inspector visited his shop in Larne and presented a prescription. The assistant said he could not do it then, but asked him to come back. When the inspector returned he was handed the bottle (produced), which was marked "The Mixture. One tablespoonful to be taken every four hours. Frederick T. Smith, Medical Hall, Larne and Antrim." There was a stamp on the prescription, from which it would appear that Mr. Smith's assistant had had the mixture made up outside. On July 7 the inspector again had the same prescription made up. He paid 1s. 4d. for the bottle. Mr. Meeke then called attention to a bottle of quinine and iron tonic bought from the defendant on one of these occasions, which bore the inscription "Manufactured only by F. T. Smith, chemist." He also showed advertisements, one of which read "Smith's Medical Hall, Main Street, Larne," and another, "Agent for Larne, F. T. Smith, chemist, Main Street, Larne." From all these matters he asked the Magistrates to draw the conclusion that the defendant, a registered druggist qualified to sell poisons, had persistently and constantly kept open his premises for the compounding and dispensing of medical prescriptions contrary to Section 30 of the Pharmacy Act of 1875.

Mr. Wm. McGlennon, the inspector who obtained the medicine, was then sworn. He had received the prescription from Dr. Watt, Crumlin Road, Belfast. Defendant's assistant told the inspector that he would get it made up in half an hour. Witness called back in forty minutes and received the bottle (produced), for which he paid 1s. 4d. When he was getting the bottle the assistant said, "If you want that renewed, either the prescription or bottle will do for you to send back." Outside the shop were displayed the words "Smith's Medical Hall." Witness returned to the shop on July 7 and purchased the quinine tonic (produced). He said to the assistant that he wanted another bottle of the prescription, and the assistant said, "All right; I will have it for you in half an hour." He called back in half an hour and received the bottle (produced), for which he paid 1s. 4d.

Mr. Meeke put in the Register of Pharmaceutical Chemists and the Register of Registered Druggists and closed his case.

Mr. Tweed, for the defence, said the prescription had, as a matter of fact, been made up by a pharmaceutical

chemist in the town. Mr. Carson, the assistant, knew that he could not make it up, and he had got it made up in another place.

Mr. Carson, defendant's assistant, was examined, and stated that when the inspector came to the shop on June 23 witness told him that they did not compound prescriptions there, but that he would get it made up for him. Witness took the prescription to Meers, McMullan & Co., pharmaceutical chemists, who made it up, and witness handed the bottle to the inspector. The same thing occurred on July 7. Witness put on one of Mr. Smith's labels, but did not know he was infringing the law when he did that.

Mr. Tweed said he was afraid they had no defence to the summonses for dispensing.

Mr. Holmes, R.M.: Clearly you have not.

Mr. Carson, cross-examined by Mr. Meeke, stated that he was a registered druggist.

The inspector paid you 1s. 4d. How much did you pay to the other chemist?

Mr. Tweed objected.

Mr. Meeke submitted that the question was quite a fair one and one very interesting to the public.

Dr. Dundee: I object to that question being answered.

Mr. Meeke submitted that there was a precedent for the legality of the question in the decision of Mr. Byrne, late police magistrate in Dublin, in a prosecution heard before him in a similar case, in which it transpired that an allowance of 2d. per prescription was made to the druggist who gave the order.

Mr. Tweed said they pleaded guilty to the dispensing, but not to the compounding.

Mr. Meeke said if it would shorten the case he would withdraw the summonses for compounding.

This was done, and the defendant was fined 5l., and 10s. costs., on each of the two summonses for the dispensing.

Merchandise Marks Act, 1887.

BEECHAM'S PILLS.

Before the Wakefield City Justices on August 17, Morris Clear, sauce manufacturer, Normanton, was charged with using the trade-mark "Beecham's Pills," and falsely applying the name Beecham's Pills to pills not manufactured by Thomas Beecham, St. Helens.—Mr. W. H. Kingswell, jun., who prosecuted on behalf of the proprietors of Beecham's pills, said that defendant carried on business at Normanton as John Bull's Sauce Co., and had added to that business the manufacture of pills. Mr. Kingswell handed up to the Bench a card to which were affixed several boxes of pills inscribed "Beecham's Pills: worth their weight in gold," and contended that as defendant had only omitted the letter "e" the matter came within this Act.—Defendant not being present, the Magistrates' Clerk said the case could not be proceeded with in his absence.—Mr. Ellieon, jun., said there had been some misunderstanding; he understood there had been an intention to apply for an adjournment.—Mr. Kingswell replied that defendant had instructed a firm of solicitors in Wakefield, who had advised him to obtain counsel; they had retained counsel, and had asked defendant to meet them, but as he had not kept the appointment, and as they had not had any further instructions, as far as they knew, they had finished with the matter. If the case went against defendant the Bench could order the pills to be confiscated.—It was decided to issue a warrant for defendant's apprehension.

The warrant having been executed, the case again came up on August 19, when Mr. T. E. Catterall appeared for the defendant, who pleaded guilty, but said he was ignorant on the point of law.—Mr. Kingswell having again explained the offence charged, Thomas William Mather, travelling inspector for Beecham's, said that in Wakefield he found small general dealers had bought pills from prisoner, and the sale was calculated to deceive people into believing that they were obtaining Beecham's pills.—Jane Elizabeth Cookson, Haddingley Hill, Sandal, said prisoner sold her some "Beecham's pills," and he gave her to understand they were Beecham's.—Inspector Tattersfield said that 1,800 boxes were found on prisoner's premises.—Mr. Catterall said that on his advice prisoner had pleaded guilty to the two charges. He was fifty-three years of age, and that was the

first time he had been charged with any offence. Prisoner had instructed him that he had manufactured these pills and sold them to small tradespeople from July 26 to August 9, when, without any previous warning from Beecham's, he was served with a summons, and a warrant was afterwards taken out. When the police officers came prisoner rendered them every assistance. Two women would tell the Court that when prisoner sold them these pills he did not call them Beecham's pills, but he called them Becham pills. He appealed to the Bench not to send prisoner to prison, and asked them to inflict a fine such as prisoner could meet. The object of Beecham's had been attained, and it would be a lesson, not only to the prisoner, but to other people throughout the country. —The Magistrates fined prisoner 5*l.*, with 5*l.* 5*s.* costs, or in default two months' imprisonment. The pills were ordered to be destroyed. There was no conviction in the second case.

Sale of Food and Drugs Acts.

SOLUTION OF AMMONIA.

At Evesham Borough Petty Sessions on August 16, Mr. William Jesse Rutherford, chemist and druggist, 46 High Street, Evesham, was charged with selling on June 21 solution of ammonia over-strength. P.C. Davis said he instructed Miss Mary Jones to purchase 1 lb. of solution of ammonia B.P. Defendant supplied her with it, and had admitted serving her. Miss Mary Jones said she paid defendant 2*s.* for the ammonia. Mr. Cecil Duncan, public analyst for the county of Worcester, said the sample he analysed contained 36½ per cent. of ammonia, and the proper strength of solution of ammonia B.P. as asked for would have been 10 per cent. The strength of strong solution of ammonia is 32½ per cent., so that the sample was nearly full strength. Solution of ammonia was a powerful drug, and was frequently used as a drug and for exterior application. It was largely used in compounding other drugs and medicines, and serious harm might have been done if the stronger solution was sold instead of the weaker. Defendant, who did not appear, was fined 2*l.* and 1*l.* 14*s.* costs.

Deed of Arrangement.

Higson, John, 19 Kingsmead Square, Bath, Chemist.—Trustee: A. A. Gooding, 5 Green Street, Bath, accountant. Dated August 15; filed August 19. Liabilities unsecured, 389*l.*; estimated net assets, 150*l.* There are no trade creditors.

Gazette.

Partnership Dissolved.

BLIGH, S. E., and POWELL, D. E., High Street, Tooting Graveney, London, S.W., physicians, etc., under the style of Bligh & Powell.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATION.

CLARK, ALLAN AIKEN, Sheffield, physician and surgeon.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

HEALTH SUPPLIES CO., LTD. (P.C.).—Capital 910*l.* Objects: To take over the business of manufacturers of and dealers in the "Microvoid" and "Victoria" soaps and antiseptic and other soaps and toilet-preparations, generally carried on by the Health Supplies Co. (formerly by the Sharon Chemical Co., Ltd.) at Rose Hill Street, Derby. F. J. R. Carulla, Derby, is managing director for life.

MAYALL, SON & JACKSON, LTD. (P.C.).—Capital 2,000*l.* Objects: To carry on the business of manufacturing confectioners, manufacturing soapmakers, dealers in table specialties, chemists, druggists, etc., and to acquire the business of manufacturers' agents carried on by D. Mayall and W. Mayall at 101 Leadenhall Street, E.C., as Mayall & Son. The first directors are D. Mayall, F. L. Jackson, and W. Mayall. R.O., 101 Leadenhall Street, E.C.

WILLIAM W. OSGERBY, LTD. (P.C.).—Capital 3,000*l.* Objects: To carry on the business of manufacturers and dealers in boiler composition, washing-powders, bleaching soda and powders, water-softeners, dry-soaps, etc., and to adopt an agreement with A. J. Osgerby for the acquisition of the business of a soap and chemical manufacturer and boiler-composition maker carried on by him as William W. Osgerby and Osgerby Bros. The first directors are A. J. Osgerby (governing director) and W. H. Osgerby. R.O., Hedon Road, Hull.

W. STADING & CO. (CHEMICAL MANUFACTURERS), LTD.—Capital 50,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturing chemists, druggists, drysalts, etc., and to adopt an agreement with Chemische Fabrik W. Stading & Co. The first directors are P. Eissner, Hardenbergstrasse 48, Leipzig, Germany, merchant; O. Reichelt, Kantstrasse 44, Leipzig, Germany, gentleman; M. Winkler, Bochlitz, Ehrenberg, Germany, merchant; W. Stading, Bochlitz, Ehrenberg, Germany; K. Tanzer, 1 Peterstrasse, Leipzig, Germany, merchant; H. Hertford, 44 Piccadilly Circus, W., merchant; and A. Dempsey, 30 Alloo Road, Deptford Park, S.E. Registered by Karuth & Co., Broad Street House, E.C.

Company News.

JOHN OAKEY & SONS.—The directors announce an interim dividend at the rate of 10 per cent. per annum on the ordinary shares for the six months ending June 30.

JAMES' DRUG-STORES, LTD.—At a meeting held at 51 Little Britain, London, E.C., it was resolved that the business of this company be voluntarily wound up. Mr. F. H. Rudge James has been appointed liquidator.

RATHKAMP & CO., BATAVIA.—The business in drugs, chemicals, and allied products which has been carried on by Messrs. Bruins and Bal under the style of Rathkamp & Co., Batavia, Bandong, etc., has been converted into a limited liability company for a duration of seventy-five years, with a capital of 1,500,000*fl.*, in 1,150 shares of 1,000*fl.* each. Mr. J. J. M. Maas is managing director.

Mortgages and Charges.

Under the Companies (Consolidation) Act, 1908, Sec. 93, the mortgages or charges therein specified are (except in Scotland) void against the liquidator and any creditor of the company unless filed with the Registrar in accordance with the conditions laid down in the Act.

Full statutory particulars of the following have been filed at Somerset House, London, W.C.

Capsuloids (1909), Ltd.—Particulars of 3,000*l.* debentures, created July 23, the whole amount being now issued. Charged on the company's undertaking and property, present and future, including uncalled capital.

Evans Sons Lescher & Webb, Ltd.—Memorandum of satisfaction in full on July 4, 1910, of mortgage dated June 15, 1892, securing 2,000*l.*

Harringtons, Ltd.—Charge on part of the lands of commons in the parish of St. Anne, Shandon, Cork, to secure any amount due or to become due from the company to the Munster and Leinster Bank, Ltd., on current account.

Weston Chemical Co., Ltd.—4,000*l.* debentures, created June 2, and secured by trust deed dated July 23, 1910, the whole amount being now issued. Property charged: Premises at Weston Point, Runcorn, Cheshire, and the company's undertaking and property, present and future, including uncalled capital (if any). Trustees: J. S. Parkin and A. T. Hawes.

Recent Wills.

MR. THOMAS SUTTON TIMMIS, chemical-manufacturer, Liverpool and Widnes, left estate valued at 657,042*l.* gross and 643,247*l.* net, which is to be held in trust for his children and their children.

MR. JAMES McLACHLAN, The Park Hall, West Bowling, Bradford, oil distiller and refiner, who died on June 26, left estate of the gross value of 5,062*l.* 4*s.*, of which the net personalty has been sworn at 2,808*l.* 14*s.* 10*d.*

DR. JAMES MORRIS, Clunie Cottage, Dunfermline, N.B., physician and surgeon, who commenced his career as a chemist's apprentice at Dunfermline, and died on May 2, left personal estate valued at 3,435*l.* 17*s.* 10*d.*, of which 3,119*l.* 16*s.* is in Scotland.

GINSENG to the value of 18,381*l.*, or 1,810 cwt., was imported into Amoy, China, during 1909. It chiefly came from Korea, and the trade is entirely in the hands of the Japanese. Demand exceeded supply last year, with the result that prices rose considerably.

Births.

DRYNAN.—At Stewart Street, Carlisle, on August 18, the wife of John F. Drynan, chemist and druggist, of a son.

KENDREW.—At Southbank Pharmacy, Southport, on August 17, the wife of W. H. Kendrew, chemist and druggist, of a son.

RITCHIE.—At Calcutta, on August 16, the wife of D. H. W. Ritchie (and daughter of Mr. Charles Kerr, Ph.C., Dundee), of a daughter.

ROBINSON.—At The Cowper Pharmacy, Market Place, East Dereham, Norfolk, on August 18, the wife of Alfred E. Robinson, chemist and druggist, of a son.

Marriages.

BYRDE—WEDDELL.—At St. George's Church, Jesmond, Newcastle-on-Tyne, on August 15, by the Rev. Canon Boot, Owen Richard Augustus (elder son of the late Rev. R. A. Byrde, of Honiton, and grandson of the late Colonel H. C. Byrde, of Goytre House, Monmouthshire) to Lesley, eldest daughter of Mr. George Weddell (Cerebos, Ltd., and Mawson, Swan & Weddell, Ltd.). After the ceremony Mr. and Mrs. Weddell held a reception at their home, The North Cottage, Jesmond.

HARPER—MCDOWELL.—At Dundonald Presbyterian Church, Belfast, on August 5, by the Rev. D. S. K. Coulter, John W. Harper, son of Mr. John C. Harper, Gilnahirk, to Agnes, daughter of Mr. Saul McDowell, druggist, Shankill Road, Belfast. [Mrs. Harper is a member of the orchestra which renders such valuable services at the social evenings of the Chemists and Druggists' Society of Ireland.]

SUTHERLAND—HUNTER.—At the Station Hotel, Perth, on August 18, by the Rev. J. McGlashan Scott, James Durie Sutherland, chemist and druggist, Giffnock, to Annabella Struthers, youngest daughter of the late Mr. Thomas Hunter, Perth.

Deaths.

BIGGS.—At 4 Grove Place, High Street, Oxford, on August 14, Mr. Walter Biggs, pharmaceutical chemist, aged eighty-one.

BOWKER.—At Claremont, Whitestakes, on August 14, Mr. Wm. Bowker, chemist and druggist. Mr. Bowker was for many years in business at Preston.

CLARK.—At 5 Miskin Street, Salisbury Square, Cathays, Cardiff, on August 16, Mr. Charles Clark, chemist and druggist, late of Bridgend.

FAHLBERG.—On August 16, at Bad Nassau, Constantine Fahlberg, the inventor of saccharine, in his fifty-ninth year. Dr. Fahlberg studied chemistry at Leipzig, and was appointed in 1881 manager of Gray's Ferry Chemical Works in Philadelphia, afterwards opening a chemical manufactory of his own at Salbke-Westerhuesen on the Elbe. Dr. Fahlberg was a contributor to the "Berichten der Deutschen Chemischen Gesellschaft," the "Journal of the Society of Chemical Industry," and other publications. The discovery of saccharine was made during a research on coal-tar derivatives, and its intense sweetness was accidentally discovered while the inventor was eating his supper, his hands, soiled with the substances with which he had been experimenting, communicating a sweetness to the bread he had handled. Dr. Fahlberg was living in the United States at the time, but in 1885 returned to Germany and started the works referred to above.

GRAY.—At 55 Lower Addiscombe Road, East Croydon, on August 24, Mr. Charles G. Gray, chemist and druggist, aged fifty-three. Mr. Gray had been ailing for the past few weeks with an internal disorder, but the end was unexpected, as his case had not been considered hopeless. He

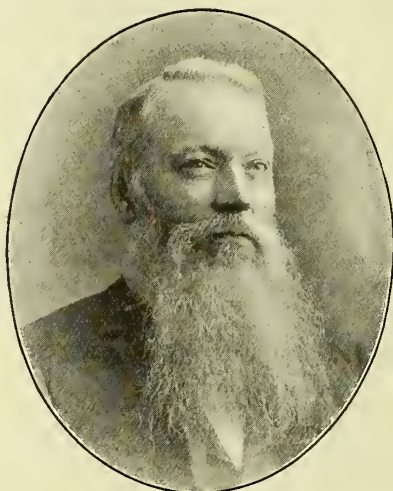
was much esteemed and respected in the neighbourhood, and owned a pet trained boarhound which collected for local charities at outdoor entertainments.

KIDD.—At Lowton Junction, on August 14, Mr. John Wesley Kidd, chemist and druggist, for many years in business in High Street, Golborne (Lancs), aged sixty-four.

LEWIS.—At Llwynabrain, Drefach, Glamorganshire, on August 12, Mr. Llewelyn Lewis, pharmaceutical chemist, aged thirty.

McKAY.—At Dunedin, N.Z., on June 7, Mr. William McKay, Ph.C. Mr. McKay succeeded to the business carried on by the late Mr. D. M. Mackay at 260 Union Street, Aberdeen, and afterwards sold it to Messrs. George Reid & Sons.

NEWBERY.—At Northwood, South Croydon, on August 22, Mr. Lionel Newbery, of Messrs. Francis Newbery & Sons, Ltd., Charterhouse Square, London, E.C., aged seventy-three. Mr. Newbery had been laid aside from business since February owing to a severe attack of neuritis, which caused him great suffering. Two months ago he improved, and we received a cheerful letter from him, which indicated hope of recovery, but his strength gradually waned, and he died on Monday morning. Mr. Newbery was the second of the two sons born to Colonel John Newbery



MR. LIONEL NEWBERY.

and his wife Fanny, the daughter of Colonel Henry Le Blanc. Colonel Newbery was the eldest son of Francis Newbery, son of John Newbery (who founded the business in 1737), and he inherited the business in 1818, when his father died. At that time Colonel Newbery held an appointment in the General Post Office (of which his brother-in-law, Sir Francis Freeling, was Secretary), which, with his colonelcy of the Sussex Militia, occupied his chief attention. His younger brother, William, was partner with him, but the business was left pretty much to take care of itself. Mr. Lionel Newbery and his elder brother, Mr. Arthur Le Blanc Newbery, were educated privately, and as youths entered offices of City merchants who were engaged in export trade. In pursuit of this calling Mr. Arthur Newbery went to India and Australia, and was in Melbourne when his father died in 1854. Colonel Newbery left the business to his two sons, and Mr. William Newbery being dead, the full responsibility for its conduct fell upon Mr. Lionel Newbery (then in his eighteenth year) until the return of Mr. Arthur from Melbourne in 1858. This was the signal for new life being thrown into the old concern then housed at 45 St. Paul's Churchyard. Mr. Lionel Newbery looked after the financial or counting-house side of the business, and his brother has supervised, and is still supervising, the manufacturing departments. Both were alive to the possibilities of business extension outside the United Kingdom—Mr. Arthur, from his Indian and Colonial experience, and Mr. Lionel, from his travels on the Continent and his visits to the

United States, had personal knowledge of what was wanted. The 'sixties of last century were years of great progress for them, and their energetic conduct of the business resulted in successive removals to 44 St. Paul's Churchyard (1869), Newgate Street (1872), King Edward Street (1882), and Charterhouse Square (1899). About the time of the second of these removals they established a branch in rue de Provence, Paris, and their Continental connection remains an important part of the business, they being sole agents for many well-known specialities. Similarly they have been the means of introducing as sole agents numerous American medicines and specialities, such as Messrs. W. R. Warner & Co.'s products and Valentine's meat-juice. Mr. Lionel Newbery was personally acquainted with the leading American proprietors, through his visits to the United States, and was regarded by many of them as a personal friend. His second son, Mr. Francis Newbery, entered the business twenty-two years ago, and became his immediate assistant in the counting-house, and has latterly taken over its management entirely. The last important change in the business was in 1904, when the firm became a limited company. Mr. Lionel Newbery was a Freeman of the City of London, being a member of the Goldsmiths' Company, as all the family have been since Francis Newbery joined the company. He was one of the handsomest men in the City: tall and erect, with a flowing white beard and kindly twinkling eye, he commanded attention wherever he was. Sixty years' acquaintance with the City and business in it give him a rich store of facts regarding the changes which had occurred in his time. In the patent-medicine business he was an authority, and his opinion was much sought for by lawyers, his affidavits being valued in the Courts, and frequently, with Newbery's catalogues, they settled questions of priority. He did conspicuous service to the trade in 1865 to 1873, when what was known as the "Betts' Suits" (respecting metallic capsules) were going through the Courts. A defence fund was started in 1865, Mr. Charles Maw, Messrs. Drew, Barron & Co., and Messrs. F. Newbery & Sons each contributing 100l.; subsequent subscriptions in 1869, 1870, and 1872 bringing the total to 1,164l. Mr. Elias Bremridge was secretary of the fund, and Mr. Newbery acted as treasurer after the death of Mr. Wm. Twinberrow. This long litigation ended satisfactorily to the defence, and was one of the most remarkable drug-trade events of the nineteenth century. Mr. Newbery had a sound knowledge of finance, and acted as treasurer for numerous charitable bodies. He married in 1867 Emma, the daughter of Mr. White, Aylesbury, his brother Arthur marrying her sister on the same day. Mrs. Lionel Newbery survives her husband, with two sons and two daughters. The eldest son is the Rev. Lionel Archibald Newbery, M.A., Vicar of Holy Trinity, Redhill; the second son, Francis Le Blanc Newbery, has, as already stated, taken his father's place in the business; and a third (the Rev. Herbert Newbery) died a few years ago. The funeral took place at Kensal Green Cemetery on Saturday, August 27, at 1.30 p.m. We may fittingly conclude with the following remarks by Mr. E. Pickering, a director of Francis Newbery & Sons, Ltd., who was associated with Mr. Newbery for over forty years, and who speaks, not only for himself, but for all who are connected with the house of Newbery:

It is now pretty well known that we at Charterhouse Square have for months past missed the cheering presence of our dear friend "Mr. Lionel," as he liked to be called, and whose acute sufferings are now peacefully ended. We look back upon him with pleasant recollections of a genial personality and consistent thoroughness in handling the multifarious details claiming his attention. What struck one most, perhaps, was his inspiring faculty of being able to look on the "bright side of things," or rather to see that most things had their "bright side"—which was not always apparent. His *bonhomie* and persistency were indeed characteristic of

"One who never turned his back, but marched straight onward,

Never doubted clouds would break."

His last visit to the City was at the end of February, since which time the torturing neuritic pains have never been entirely absent. Still, up to quite a recent date he was taken out of himself when current business matters were conversed upon, for which frequent opportunities

were taken as his strength permitted. Hope of improvement, however, there was none, and a life well lived—may it be worthily emulated—slowly passed,

"Till, like a clock worn out with beating time,
The wheels of weary Life at last stood still."

NICHOLSON.—At Bardon Mill, Northumberland, on August 9, Mr. Edward Nicholson, chemist and druggist. Mr. Nicholson formerly lived at 8 The Crescent, Whitley Bay.

Personalities.

Notes for this section must not be in the nature of advertisements, and they should be authenticated when sent to the Editor.

MR. JOHN HULL, Messrs. Parke, Davis & Co.'s representative in South Africa, sailed on August 20 after three months' holiday in this country.

MR. WILLIAM GREIG, chemist and druggist, 57 Glassford Street, Glasgow, has been added to the Commission of the Peace for the County of Lanark.

MR. A. McDONOUGH, of Messrs. McKesson & Robbins, New York, is now in London on a business visit, and may be addressed care of his agent, Mr. C. F. Gerhardt, 5 Fenchurch Street, E.C.

AMONG the girls to whom "The Throne and Country" has awarded prizes in the Pretty Children's Competition occurs the name of Sylvie Constance Umney, who is the daughter of Mr. and Mrs. John C. Umney, 2 Cambalt Road, Putney, S.W.

MR. ENU BONTCHEFF, of Messrs. Bontcheff & Kidoff, of Kazanlik, Bulgaria, proprietors and distillers of the "B. & K." brand otto of rose, is now in London on a business visit, and may be addressed care of his agents, Messrs. Fredk. Boehm, Ltd., 16 Jewry Street, London, E.C.

FRANK LESLIE OGLESBY, son of Mr. Arthur Oglesby, chemist and druggist, Barnsley, has, within a month, passed the College of Preceptors and Oxford Junior Local examinations. Though only fifteen years of age, he has been awarded first prize for the essay on the success or otherwise of the Barnsley Shopping Week, the competition being open to all up to the age of eighteen.

MR. ROBERT E. WOOD, Wellington, N.Z., who is well known to the drug-trade in Australia and New Zealand, is now on a visit to the Old Country, with the object of securing agencies. Mr. Wood was apprenticed to the wholesale drug-trade thirty years ago, with Messrs. Kempthorne, Prosser & Co., Christchurch, N.Z. After the indentureship of six years was completed he extended his experience in Australia, first for two years with the Australian Drug Co., Sydney, N.S.W., then for six years with Messrs. Felton, Grimwade & Co., Melbourne, Vic. Returning to New Zealand he joined the staff of Kempthorne, Prosser & Co., New Zealand Drug Co., Ltd., and during nine of that sixteen years' engagement has been the company's manager in Wellington. This position he has recently resigned in order to commence business on his own account as a manufacturers' representative and Australian agent. Mr. Wood may be addressed care of the Union Bank of Australia, Ltd., 71 Cornhill, London, E.C.

Aphorisms and Epigrams.

Written by "C. & D." Subscribers with Words selected from "C. & D. Diary" Advertisements.

THE CHEMIST AND DRUGGIST is an essential journal for pharmacists and all engaged in the drug and chemical trade.—*John R. Goldthorpe (Beverley).*

THE CHEMIST AND DRUGGIST, the standard for everything, at the right price from the most up-to-date houses in the world.—*J. R. Lewis (Ynysyhir, Glam.).*

No chemist should be without the *Chemists' and Druggists' Diary*. It does its work right well; splendid useful business help.—*R. Cooper (Higher Broughton).*

If you wish to succeed send for THE CHEMIST AND DRUGGIST. There is no better assistance.—*C. A. Critchley (Blackburn).*

To sell drugs and all chemists' sundries, wholesale and retail, advertising in THE CHEMIST AND DRUGGIST is the essential point.—*Joseph Mermel (West Croydon).*

More Hints on Window-tickets.

THERE are proverbially more ways than one of killing a cat, and so, perhaps, a few further suggestions on window-ticket writing may be helpful to those who wish to profit by Mr. Marfitt's paper in the *C. & D.* Winter Number (January 29, p. 168). Without posing as an expert, the writer has devoted a good deal of attention to ticket-writing for several years past, and believes the following hints will be found helpful.

Treating the matter from the beginner's point of view, we will assume that the novice has decided on the shape and size of the show-card required, and has the cardboard cut in readiness. Now, it is not so easy as it seems to arrange even a single word so that it shall exactly and evenly occupy a given space, and the beginner will find that many alterations and erasures are necessary. If much pencilling and rubbing out has to be done on the card, the surface will be spoilt and the result may even then be unsatisfactory.

It is best to proceed in the following way: Roughly sketch out the wording required on a piece of paper of about the required size, until you have decided upon what is to be included, and have got the wording and general arrangement spaced out so as to look about right. Then, with this as a guide, take a piece of ordinary white demy of the required size and pin it down on to a drawing-board. It is better to pin down several pieces as it gives an improved surface to work on; but the lower pieces need not be considered in this article. Now with a T-square rule parallel horizontal lines to mark the top and bottom of each line of lettering, and carefully draw each letter, keeping all straight and true with the help of T-square, curves, etc. O's are often made quite circular in modern lettering. This shape is easy for the beginner, and nothing is more convenient to draw them with than a pill or chip box of the required size. There is a good deal of difference between the O's given by a G.P.O. box and its lid, and both box and lid may come in useful. If there are many circular letters, such as O, C, G, or Q, in one line, it is as well to either slightly widen or narrow the parallels so as to suit the nearest-sized pill-box in stock. A pill-box letter is done much quicker than if compasses are used. Relatively smaller boxes are useful for P's and B's.

Another useful tool is a little device for drawing A's. Get an ordinary threepenny wooden "square" (strictly speaking, it is a right-angled triangle), and cut it down until the angle at the base represents the angle formed by A with the horizontal. Any large printed A may be taken as a guide. Get the cut edge quite straight, and smooth by rubbing it on a piece of glass-paper, preferably pinned down on a flat surface. This will give a very useful tool for rapidly drawing symmetrical A's, V's, W's.

The design on the white demy can be erased and corrected *ad lib.* When quite satisfactory, remove from the board and pin face downwards on any smooth surface. If the board is used, place a sheet of newspaper, or any common paper, underneath, to keep the board clean. Now well rub the back of the design with a tuft of cotton-wool dipped into coloured chalk—a mixture of creta *præp.* (2), ferri peroxid. (1) answers very well—and when all is thoroughly rubbed over, lightly dust off the surplus chalk. Instead of the chalk, the back of the design may be rubbed over with a bit of soft crayon or blue pencil, a colour being chosen that will show up well against the colour of the cardboard. Next pin the design, face upwards, on the top of the card, pinning both to the board, and making sure that the parallel lines of the design are placed squarely on the board, and go over the design with a hard pencil, using some pressure. It will be found that the design is transferred to the card in faint chalk lines, which can be easily outlined with pen or brush and filled in with whatever colour is required. Care must be taken not to obliterate the lower part while outlining the top lines. A piece of paper to rest the hand on will prevent this. Naturally, all this takes time, but is preferable to a messy, soiled-looking result. When one gets a little into the knack of it, one feels instinctively the sizes and proportions of the lettering that can be placed on the cardboard, and can work direct on to the card, as described by Mr. Marfitt. Here

another useful little device, which can best be described as a "brush ruler," can be employed. Get a strip of perfectly straight wood, about 18 in. by 1 in. by $\frac{1}{2}$ in. Saw off two 3-in. pieces, and nail them across the two ends of the 12-in. piece that remains, so as to form a sort of bridge. Fill a brush with colour or ink, hold nearly vertical, and this ruler will enable one to paint a perfectly straight line of almost any thickness required.

As an example, suppose we want the words "Cough Balsam" on one line, letters 2 in. high. A 2-oz. chip box is exactly 2 in. across, therefore draw two parallel lines a fraction over 2 in. apart, to allow for the thickness of the pencil or chalk when travelling round the box. On a white or light-coloured card use a BB pencil; on a dark card, a well-pointed white crayon: in either case working as lightly as possible. Start the C, say, an inch from the margin, and sketch in the letters very lightly. When "Cough" is done, mark off an inch from the other end and sketch in "Balsam," but work backwards, beginning with the M. Thus you get any inequality in the spaces in the middle of the design, which is much better than having it at one end. Now take the T-square and pencil (or chalk), and draw the vertical lines of U, H, B, L, M, and the serifs of C, G, S, L. Place the "A" square (as described above) against the edge of the T-square, and draw in the A and the middle of M. However thick the letters are to be, one line will usually be sufficient as a guide to keep them straight and true. Now draw circles with the chip box for C, O, G, and with a smaller box finish the bottom of U. S must be done free-hand, and is a fine letter to do, giving ample scope for skill. Even if there be no straight line at all in the letters, these straight chalk marks make an excellent "scaffolding," so to speak, on which to base the curves of the letters. And if the C, O, and G are not to be circular, the circles drawn are a help in getting the shapes true and even. Next take the brush ruler, and a full brush of colour or ink, and go ahead with the straight lines of the letters, using the chalk-marks mainly as a guide to getting the letters in their proper position and properly vertical. Next come the curves of the letters, and their serifs, with any ornamentation or modification of shape that taste may suggest.

It is an excellent plan to cut out of magazines, etc., as many types of lettering as possible, and make a collection of them, together with any show-cards that are likely to be of use. But remember that legibility comes first, so that too many flourishes and too fanciful lettering should be avoided. Old English, for instance, is of little use on show-cards.

There are many things in a chemist's shop that come in useful. If the work has to be done in the intervals of serving pen'orths, there is often a desk or dispensing-screen behind which it can be done out of the public gaze. Nothing is better for mixing colours in than shallow "covered pots," and if any colour is left it can be covered over and set aside for use later. A drop or two of glycerin and water (*partes æq.*) will prevent the colour getting hard. If no compasses are handy, one can generally find an ointment-jar, bottle, or sieve to help in drawing large circles, and the writer has routed out an old glass facia with perfectly straight bevelled edges that is matchless either as a ruler or as a straight-edge for cutting cards. Do not rely, however, on your stock of camel-hair brushes. They are all right, as Mr. Marfitt says, for filling in the letters, but are useless for fine work, such as outlining the letters. Get one or two sables, and get the best that money can buy. Then you will not lose your temper, and will get more money out of the cards, and so will quickly recoup your outlay.—(86/29.)

THE IMPORTS of drugs and medicines into Venezuela during 1908-9 amounted in value to 59,195*l.*, of which the United States supplied 23,373*l.*; Germany, 16,746*l.*; the United Kingdom and Colonies, 8,002*l.*; France, 5,174*l.*; Spain, 3,341*l.*; and other countries, 2,559*l.*

SIMPLIFYING HYPODERMIC INJECTIONS.—Fleet-Surgeon A. G. Wildey, with a view to simplifying the administration of hypodermic solutions on active service, has contrived an inexpensive shallow glass reservoir, to hold an ounce of solution, and fitted with two caps, or a double-layered india-rubber detachable cap. Through the cap the needle of the syringe is plunged, and on withdrawing the needle the puncture closes.

Prescription Problem.

ALTHOUGH the time for receiving replies to the problem set in THE CHEMIST AND DRUGGIST, August 6, was accidentally restricted, this has not prevented considerable interest being taken in the competition. At first sight the solution of the problem seems easy, but one soon stumbles against a difficulty in the second ingredient. There has been a great diversity of opinion as to this item, but the majority agree with the pharmacist who sent us the prescription that it is intended for Tr. chinæ (cinchona). The following are some of the suggestions which have been received:

Tinctura amara	2	Tinctura cinchonæ	9
" arnicae	1	" cinnamomi	40
" aurantii	9	" cort. limonis	43
" chamomillæ	11	" hamamelis	2
" chekan	1	" krameriæ	6
" chinæ	65	" laurocerasi	1
" chinonæ	7	" lavand. co.	3
" chinini	2	" quassia	3
" chiratae	8	" quinae	21
" chuan (?)	1		

The third ingredient was returned by two competitors as ac. hydrobrom. dil., while the vehicle was read by three people as aq. cassia and as aq. cinnamomi. The prescription, according to the majority of the competitors, reads as follows:

Pot. chlor. 3j.
Tr. chinæ 3j.
Acid. hydrochlor. dil. 3j.
Syr. mori 5iss.
Aq. carui ad 5vj.

M.

Signe—3j. every 3 hours.

The four copies of "The Chemist's Medical Dictionary" which were promised are awarded as follows, the competitors being those who sent in the first replies corresponding with the solution given above:

London: Mr. T. B. Dawson, c/o Messrs. Walton & Curtis, 190 Broadhurst Gardens, West Hampstead, N.W.

Provinces: Mr. Wise, Chemist, St. Neots.

Ireland: Mr. G. R. Calvert, Ph.C., Ballyclare, co. Antrim.

Scotland: Mr. W. C. Weir, c/o Messrs. H. C. Baildon & Son, 73 Princes Street, Edinburgh.

The next exercise is as follows; replies should be sent in on or before September 3:

17
Tinctura cinchonæ 3j
P. a. chinæ 3j
2 Myrica
Syr. carui 3j
T. a. chinæ 3j
T. a. chinæ 3j
2j
Syr. carui 3j
T. a. chinæ 3j

We have set aside four copies of "The Chemist's Medical Dictionary," which will be awarded to the competitors who send correct solutions of the problem; should there be equality in this respect, the time of posting and literal accuracy in transcription will be taken into account, our award being final. Prizes will not on this occasion be awarded to any who have received prizes during June, July, or August.

Trade Notes.

MESSRS. F. NEWBERY & SONS, LTD., 27 and 28 Charterhouse Square, London, E.C., will be closed on Saturday, August 27, on account of the funeral of Mr. Lionel Newbery.

A SPECIAL OFFER is made in our advertisement columns by Messrs. A. Stadler & Co., 16 Water Lane, London, E.C., for the purpose of introducing their eau de Cologne to the trade.

MR. G. N. MORRIS, of The English Pharmacy, Khar-toum, intimates in this issue that he will be glad to undertake the representation in the Soudan of firms who produce or deal in druggists' goods.

PENNY STATIONERY.—Mr. Walter Frost, 247 Fosse Road South, Leicester, sends us samples of some new lines in penny stationery packets. The packets contain paper and envelopes of good quality, and are packed in good style.

PHILLIPS' "TRUE" HAIR-PRODUCER.—The Amman Toilet Co., Brynamman, South Wales, are asking chemists to stock this speciality in view of a demand which is being created by means of advertisement. It is a 2s. 6d. article.

"BOOKKEEPING SYSTEMS."—This article in last week's C. & D. has attracted some notice, and Messrs. Hammond & Stow, Ltd., 27 Warwick Lane, London, E.C., call attention in our advertising-pages to the advantages of the Montague outfits for card-ledgers.

MESSRS. DUDLEY & Co., window-ticket experts, window-fitting specialists, etc., Holloway Road, London, N., are opening sample-rooms at 25 Wood Street, Cheapside, E.C., for the convenience of shippers and customers visiting London, who may thus inspect samples of all their specialities without going further north.

PROTECTED ARTICLES.—The P.A.T.A. has during August added the following to the Protected List: Analax; Carabana Water; Carrick's Liquid Peptonoids with Creosote; Dralle's preparations, additional; Muller's Salts; Per-lax; Piver's specialities, additional; Poppoea Rouge Pads; Robin's preps.; Sanitas preparations, additional; Vegetable Leaflets; Walton & Curtis's preparations; and Zodiac Electro Massage Machine.

MESSRS. WRIGHT, LAYMAN & UMNEY, LTD., South-Wark Street, London, S.E., inform us that the response to their Holidays Competition has been so large that they have decided to double the value of the prizes offered. An announcement in regard to the matter appears in this issue. We are asked to state that the company have a limited supply of the books of views left, and will send parcels up to twenty-five to any retailer who asks for them by postcard.

Business Changes.

Notes for this section must not be in the nature of advertisements, and they should be authenticated when sent to the Editor.

MESSRS. HARRATT & Co., 17 Jamaica Row, have removed to 16 Spiceal Street, Bull Ring, Birmingham.

MESSRS. ALEXANDER & SONS, opticians, Chesterfield, have now opened a sight-testing room at 61 Westgate, Mansfield.

MESSRS. T. LEMALE & Co., mineral-teeth manufacturers, have removed from 8 Poland Street, W., to 51 Great Marlborough Street, W.

MR. A. J. WILLIAMS, chemist and druggist, has opened the West End Pharmacy at Lavant Street, Petersfield. Mr. Williams was formerly in business at Havant.

THE old-established business of Messrs. Christie & Bennett, Newton Abbot, Devon, has been sold to the Timothy White Co. Mr. Wm. Bennett, the late proprietor, continues as manager.

THE INTERNATIONAL BOTTLE COMPANY have moved to new premises at 168 Fenchurch Street, London, E.C. The company's telephone number (Central 4389) and telegraphic address (Autrefois, London) remain unchanged.

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Action of Light upon Camphor and Fenchone.—G. Ciamician and P. Silber ("Ber.," 1910, 43, p. 1340) find that camphor in dilute alcoholic solution when exposed in sealed flasks to action of light for several months yields campholene aldehyde and an unsaturated ketone of the same composition ($C_{15}H_{16}O$) boiling at 203° to 204° , and unchanged camphor. The semicarbazone of the ketone melts at 151° to 152° C. Fenchone similarly treated gave carbon monoxide, an oil boiling at 175° to 180° C. and a glycol ($C_{10}H_{18}O_2$), which, on crystallising from benzene, melted at 138° to 139° C.

Saffron.—P. Rabet ("Bull. Sc. Pharm.," xvi., p. 401) submits that the benzene test for saffron in the French Codex should be retained and not deleted as contended by the Syndicat de la Droguerie. He gives the following results (per cent., except tinctorial power) of his analyses:

	Choisi	Gatinajs	Spanish	Various Sources (Third quality).		
Moisture	17.2	14.5	10.0	12.0	13.6	10.8
Ash ...	4.5	6.2	6.5	7.0	6.0	8.0
Extractive	65.0	64.0	69.0	64.0	61.0	66.0
Tinctorial power	+ 1,300,000	+ 1,300,000	+ 1,225,000	1,150,000	1,100,000	1,500,000

The author points out that Gatinajs saffron possesses greater tinctorial power than Spanish saffron. The colouring power of saffron is equal to 1/50,000 if the extract corresponding to 1 gram of saffron in 50,000 grams of water is perceptibly yellow in diffuse light, when the tubes compared are held above a sheet of ground glass.

New Sensitive Test for Hydrocyanic Acid.—James Moir ("Proc. Chem. Soc.," No. 371, p. 115) states that his new reagent will detect one part of hydrocyanic acid in five millions of water. The test depends upon nascent cyanogen, liberated from the action of cupric copper on cyanides, oxidising a leuco-compound. The reagent is made by adding small quantities of copper acetate and acetic acid to a warm solution of hydrocerculignone (tetramethoxydiphenol) in a large quantity of water, digesting the mixture at 50° for a few hours, and filtering. The solution to be tested is rendered faintly acid with acetic acid (using sodium acetate also if a "strong" acid is present), and then treated with about one-quarter of its volume of the reagent. An immediate crystalline precipitate of cœrulignone (red with purple lustre) is obtained if the solution contain over 1 in 100,000 of hydrocyanic acid; with weaker solutions, a brick-red coloration. Oxidising substances must be absent, but most of them can be avoided by applying the test on paper exposed to the vapour evolved by the liquid to be tested, as in the guaiacum test. A similar reaction is given by other tetra-substituted diphenols and by benzidine and its derivatives. Benzidine gives an indigo shade; dianisidine, bluish-green, and tolidine, a green shade. These latter reagents are more trustworthy and keep better. The colours produced are all derivatives of so-called diphenol-quinhydrone.

Rapid Method of Hydrolysing Starch.—G. A. Olson ("Journ. Ind. and Engineering Chem.," I., No. 7, p. 445) suggests the following rapid method for hydrolysing starch:

Place in a 500 c.c. Kjeldahl flask 1 gram of material. Tap the neck of the flask in order to settle the fine particles adhering to the sides. Mix with this weight 10 c.c. of distilled water, and rotate slowly and steadily (one revolution per second) so as not to wash any of the sample too high up on the sides of the flask. Next, cautiously add 6 c.c. of sulphuric acid (specific gravity 1.84), and rotate somewhat more rapidly than in the first instance. After the acid and material have been thoroughly mixed, hold the flask in one hand over a flame about two inches high, and rotate about one revolution per second at first, and then as the mixture increases in temperature rotate with an accelerated motion up to five revolutions per second. Continue rotating at this rate until the mixture becomes nearly transparent. At this stage add 10 to 15 c.c. of distilled water, continue rotating, and heat again, this time to boiling, cool, neutralise with sodium hydroxide (using phenolphthalein as indicator); cool again, transfer to 250 c.c. volumetric flask, fill with distilled water to mark, and proceed according to one of the recognised methods for dextrose determination.

A moderate overheating does not affect the results, and in most cases sufficient colouring matter is present to act as indicator, but the addition is recommended of phenolphthalein, as it gives a sharper indication. The author contends, and gives figures to show, that the method is substantially accurate.



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Telegraphic Address: "CHEMICUS LONDON."

Telephone No.: BANK 852 (two lines).

The object of this Department is to supply names and addresses of Manufacturers of, or Agents for, goods pertaining to the Chemical, Drug and Allied Trades. The "Buyers' Guide" in each issue of "The Chemist and Druggist" affords much information, but inquiries for anything not referred to therein may be addressed to this Department. Replies will be furnished immediately, or inserted in this section free of charge.

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

- 8/25. "Trefufia": supply.
- 7/16. "Neutroxid": supply.
- 11/13. "Beranek's Tuberculin."
- 12/22. "Sofami" shampoo-powder.
- 11/12. "Odouriad's Sanitary Lamp."
- 10/18. "Colmette's Antivenin Serum."
- 10/30. "Lathom's Ozonators and Ozone Fluid."
- 13/16. Cockburn's flexible gelatine capsules for heartburn.
- 13/19. "Kill-nit" ointment: address of makers who pack with customer's name.

INFORMATION SUPPLIED.

During the past week we have answered inquiries regarding the following articles. The information will be repeated to any other inquirers who send to the Department a stamped and addressed envelope for the purpose.

- "Anticor": proprietor (8/1).
- "Autotherm" flask: maker (12/1).
- "Bertelli's Catramin Pills": supply (10/52).
- "Calmine": makers (5/37).
- Card-index system for keeping accounts: makers (12/10).
- Colour-printers (7/72).
- Corn-extirpators: suppliers (8/1).
- Cuticura: makers and agents (7/14).
- Cylindrical tooth-powder tins with slot lids: makers (7/68).
- Decorated tin boxes: makers (10/56).
- Dinneford's magnesia: proprietors (7/14).
- Doan's pills: makers (7/14).
- "Earl's Pepsine": makers (5/61).
- Earthenware pots: makers (7/13).
- "Fango": makers (5/46).
- Fellows Co.: address (9/47).
- Gelatin capsules: makers (7/63).
- Hearing apparatus: suppliers (8/12).
- Incandescent mantles and burners: wholesale supply (10/26).
- "Ivory Soap": London agents (12/2).
- Indiarubber-goods: manufacturers (12/20).
- "Liverpool Chemists' Price-list": publishers (1/51).
- "Madonna" eau de Cologne (7/12).
- "Mend-it": makers (9/6).
- Migraine expeller: makers (11/13).
- Oiled silk: actual makers (7/57).
- "Parnotis": maker (8/12).
- Penny and twopenny lines: suppliers (10/25).
- Phillip's eye-shades: makers (8/15).
- Seigel's syrup: proprietors (7/14).
- Soap-dispensers: supply (8/26).
- Stationery: special supply (10/25).
- Steedman's powders: address of makers (7/14).
- Thin twine for capping-purposes: makers (10/26).
- Transparent teats: makers (11/42).
- Weighing-machines: makers (8/55).
- "Wilkinson's Sarsaparilla": proprietors (10/12).

Observations and Reflections.

By Xrayser II.

The Status Lymphaticus,

of which I wrote in this column last week, is one of the most mysterious pathological conditions known. There is some doubt whether it should be regarded as a pathological condition, since it is said to occur in people who are apparently in quite good health. As a rule, it cannot be recognised during life, and its presence is usually discovered only at the *post-mortem* examination. One German author, however, gives a list of signs by which it may be recognised, but I refrain from citing these lest some of my nervous readers—if those who read the *C. & D.* have any nerves left—should imagine they were lymphatic subjects. When we are told “that death is liable to occur without any reasonable cause, or from one so trivial as the application of cold water in a bath,” it would seem as if ignorance were true wisdom, even to the lymphatic himself. Life would hardly be worth living if every time we took our matutinal dip we had first to consider whether the lymphatic fiend had not by chance obtained an entrance, and was only waiting for a suitable moment to claim a victim.

The late Father Tyrrell,

in his last great book, “Christianity at the Cross Roads,” draws a curious parallel between the history of religion and that of medicine. Religion and medicine, he says, differ widely in themselves: the former is practically the adjustment of our conduct to a transcendent world, the latter looks merely to that adjustment which we call health; but in their origin and development the two have much in common. As respects their origin they are more closely related than Tyrrell says, for not only did they both begin in magic, but among most primitive peoples the “medicine man” is also a priest; the physicians of ancient Egypt were members of a sacerdotal college, in Israel the priesthood attended the sick, and the sacred books of the Hindoos contain their oldest records of the healing art. Disease was regarded as a devil, and an emetic was often the most efficient exorcism, though the priest would naturally attribute the result to more occult means. Authority, again, says Tyrrell, has played much the same part in religion and in medicine, and schools have centred round names rather than round systems or theories. “The arrogance of doctors and teachers has been one of the greatest obstacles to human progress. Few men can withstand the corrupting influence of unlimited trust.” Credulity (he goes on) breeds untruthfulness; the subjective is confounded with the objective, and this and the conservatism of both patients and practitioners obstruct the progress of medicine as astronomy, chemistry, and other sciences are not obstructed. Not till men are able to compare one teacher with another is trust in personal authority shaken, and even yet medical science is far removed from unification and general validity. It has, however, “passed from its chaotic and subjective to its objective and rational stage: its catholicism is in view.” For the moral he draws I must refer my readers to the book itself.

Lockyer's Pills,

Pilula Radiis Solis Extracta, as he styled them, are, I believe, no longer extant, but their virtues are still proclaimed in the magniloquent epitaph above the monument to their inventor in Southwark Cathedral. The monument itself, a huge stone structure with Ionic columns

and an arched pediment upon which lies the figure of Lockyer, in a fur gown and a great flowing wig, resting his head on his right hand and in his left hand holding a book, is the most prominent object in the north transept of the building, and challenges comparison with that of the poet Gower in the nave. Lockyer, who called himself Doctor of Physic, flourished in the time of Charles II., dying in 1672, and his pills had an immense vogue for many years after his death. There is said to be a picture in Manning and Braye's “Surrey” of him and his Merry Andrew, each on a piebald horse, selling his wares on Tower Hill, but I have been unable to find this in the book referred to. The pills were advertised to cure dropsy, consumption, aches of the limbs, agues, fevers, etc., to increase beauty and make old age comely, to preserve the taker from the evil effects of contagious airs and mischievous fogs, and, in short, as a cure-all. Lockyer was undoubtedly a mere quack, though he claimed to be a “licensed physician and surgeon,” and, like many of his kind, he did not scruple to push his trade under the cloak of religion. He appears to have been a staunch Protestant, and to this fact may possibly be attributed in part the honour done him in the church at Southwark. His epitaph is perhaps worth printing as a curiosity:

Here Lockyer lies inferred: enough, his name
Speaks one hath few competitors in fame;
A name so great, so gen'ral, it may scorn
Inscriptions which do vulgar tombs adorn;
A diminution 'tis to write in verse
His eulogies, which most men's mouths rehearse.
His virtues and his PILLS are so well known
That Envy can't confine them under stone,
But they'll survive his dust, and not expire
Till all things else at th' universal fire.
This verse is lost, his *PILL* embalms him safe
To future times without an Epitaph.

Mr. C. S. Ashton's Reading

of Dr. Hall's prescription is most welcome, and although it is only arrived at by modifying in some measure what the Doctor actually wrote, it is probably, except as regards one particular, what he intended. I have to-day examined the manuscript in a better light. The word Mr. Ashton would read *villum* is certainly either *villum* or *vellem* (the Museum assistants whom I consulted favour the latter), but *villum* makes the best sense and must be accepted, with *injeci* before it. I had overlooked the fact that Lewis and Short give an instance of its use by Terence as a diminutive of *vinum*. The word I previously read as *crotonis* is really *cratonis*, which is a very bad shot for *Cretano*, if that was intended. I thought it just possible that the meaning might be “labdanum of Croton,” Croton being an Italian seaport, and Italy, according to Lemery, one of the countries from which labdanum was imported; but this is rather a desperate guess. The point on which I question Mr. Ashton's reading is the identification of caranna with “gum caranga (tacamahaca).” I do not know the name “caranga”: did Mr. Ashton intend to write “caragna,” an alternative form of “caranna”? Even so, he can hardly be right, for caranna and tacamahaca are from different sources, and all our old Pharmacopœias and dispensatories, from 1618 downwards, include them both. Tacamahaca, therefore, though the more likely ingredient in such a plaster, would not be prescribed under the other name. I find that in my transcript I inadvertently corrected one of Dr. Hall's misspellings by leaving out of his abbreviation of “diacatholicon” a superfluous *h*. In conclusion, I should like to thank Mr. Ashton for his valuable contribution to the discussion of this interesting prescription.

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EPSOM SALTS, E.S.S.	12/6 ..	Finest Pure TOILET	32/ cwt.
Purified, Clean, and Dry	13/6 cwt.	Finest Levigated "WHITE EARTH"	18/ cwt.
Ditto, Medium Crystals	9/6 ..	(Toilet purposes)	
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LIQUORS

Editorial Articles.

Fiscal Chemistry.

THE chemical laboratories of the British Government, situated in Clement's Inn and at the Custom House, London, are the centre of a system of analytical inspection and supervision related not only (in the case of the former) to the Customs and Excise Departments of the National Revenue, but to Government Departments at home and abroad, and to the administration of certain statutes. The Central Laboratory is Imperial in many respects, and since it has in these later times been virtually elevated to the position of a Court of Appeal or Reference by Administrative and Judicial authorities, the Laboratory must, in equipment and staffing, be able to cope with problems which differ from those which relate to Customs and Excise. These problems have influenced improved equipment; but it is only fair to say that the ability of the staff in several generations to deal with external problems, and their strict impartiality, have attracted non-fiscal work. The Treasury seem to have recognised the composite nature of the work done in the Laboratory by the appointment as Principal Chemist of Sir T. E. Thorpe, who retired from that position in October 1909, after fifteen years' service. He had not,

like his predecessors, had Revenue experience and training; his work justified the departure in many ways, and finally by the selection of another scientific chemist as his successor, Dr. James J. Dobbie, F.R.S. The first report of the new Principal Chemist was issued a few days ago. It covers the year which ended on March 31, 1910, and the greater part of the work reviewed in it was done in Sir T. E. Thorpe's last months of office. The report follows precedent largely, but there are indications in it of a new hand, and a multitude of detail which at first sight seems trivial, yet it admirably exhibits the wide nature of work done, especially bringing out the assistance rendered by the Laboratory in safeguarding the Revenue. At Clement's Inn and the Custom House during the year 170,033 analyses and examinations were made, against 176,922 in the preceding year, and at the twenty-nine provincial testing and chemical stations 153,431 analyses and examinations, being a total of 323,464, or a little more than 1,000 for each working day. Dr. Dobbie's report deals with these in detail under I. Customs and Excise, and II. Other Government Departments. Our remarks are confined to those subjects which are, directly or indirectly, related to the drug-trade and pharmacy.

Spirits

are the most important goods in our business as well as to the Revenue. In 1909-10 the Customs chemists examined 209 samples of chloroform, chloral hydrate, ethers, and other compounds which are or may be made with spirit. In the preceding year 101 only were examined. No reason is given for the marked increase, but we know that these compounds were the subject of narrow scrutiny by the Treasury for the purposes of the Finance (1909-10) Act. The following paragraph is significant:

Methyl Alcohol derived from wood spirit is liable to spirit-duty if purified so as to be potable, and of 242 samples examined, fourteen were so charged. When not thus purified, it is admitted free of duty, but pure spirits, both ethyl and methyl, although rendered unfit for consumption by the addition of denaturants, are nevertheless liable to duty on importation.

We quote this from the Customs Section. It is significant because it is generally understood that certain hair-washes compounded from purified methyl alcohol and ingredients which make it "unpotable" are imported free of duty; but from Dr. Dobbie's statement it may be inferred that the methyl alcohol is not of the purified kind. It would be advantageous to have this made clear beyond dispute, as it embraces the important principle that similar compounds cannot be made in the country free of duty. There is no other reference to denatured spirit in the Customs Section, but two pages devoted to the subject occur under Excise. The production of methylated spirits in 1909-10 was 3,962,412 bulk gals., against 4,171,100 in 1908-9, but 6,686,018 proof gals. of spirit was issued duty-free during the year—viz., 2,302,901 to make mineralised methylated spirit, 3,859,158 to make the industrial, 519,818 to be otherwise denatured for manufacturing purposes, and 4,951 for use in science laboratories. These figures show decreases on the first two items and increases on the second two; but Dr. Dobbie explains that the decrease (138,891 gals.) in industrial methylated spirit is partly due to an increased issue (60,780 proof gals.) of duty-free spirit for industrial purposes. He states that the regulations for the use of industrial methylated spirit are considered as satisfactory by manufacturers who use the spirit. During last year 461 applications were made for such use, making 2,365 since October 1906, when the spirit was first issued. There might be thousands

more, considering the fact that every retail chemist who makes spirituous hair-washes containing a denaturant such as ammonia or saponin might make them with the industrial spirit, which cannot be detected by the ordinary user. We observe that the increased uses of the spirit are chiefly pharmaceutical, as may be judged by the following figures—gallons of the spirit used in the specified manufacturing operations:

—	1909-10	1908-9
Finish for sale	337,787	336,135
Varnishes, Polishes, and Lacquers for sale	811,252	858,278
Soap	144,636	140,964
Ether	166,167	161,294
Chloroform	11,038	11,808
Ethyl Chloride and Bromide	716	932
Solid Medicinal Extracts	39,831	23,224
Alkaloids and Fine Chemicals	15,788	17,263
Embrocations, Liniments, and Lotions	44,641	30,717
Surgical Dressings	15,309	9,095
Capsules and other Medicinal Appliances	1,361	1,232
Hair-washes	14,719	10,583
Cattle-medicines	1,865	1,677
Plant-washes, Insecticides, and Sheep-dips	12,981	9,617
Preservation of Specimens in Museums	8,400	8,757
Educational and Scientific Purposes in Colleges and Schools	6,160	4,951
Analytical and Scientific Purposes in Laboratories	5,107	8,322
Hospitals, Asylums, and Infirmarys ...	41,700	36,718

It is interesting to note that, besides the statutory denaturing agents, wood spirit and mineral naphtha, 80 samples of petroleum ether (2,666 gals.) were found suitable by the Laboratory for mixing with the industrial spirit used in certain manufacturing operations "where additional Revenue protection was required." In connection with the use of industrial spirit, the following observations are made:

For the purpose of controlling the use of methylated spirit a large number of samples have been examined. . . . A few instances were found where methylated spirit was being used for purposes not in themselves illegal, but for which the requisite authorisation had not been obtained. In these instances the traders were cautioned against a repetition of the irregularity. . . . In order to ensure that the conditions laid down for safeguarding the use of industrial methylated spirit are complied with, the Board of Customs and Excise have directed that preparations authorised to be made with this industrial alcohol shall be occasionally examined. Twenty-seven samples have been analysed for this purpose during the past year. No cause for complaint was found in respect of most of the samples. A few, however, were not in accordance with the requirements, and the traders were cautioned against further disregard of the restrictions imposed. The result is not unsatisfactory, as the irregularities in question were not in any case suggestive of intentional fraud, but rather of carelessness or an imperfect sense of responsibility.

The moral of the matter is indicated elsewhere in the report, and it is: Stick to the formula submitted to and approved by the Board. It is for that and nothing else that permission is given. One of the most gratifying parts of the report is that dealing with the exportation under drawback of spirituous tinctures, liniments, extracts, infusions, medicinal spirits, flavouring essences, hair-washes, brilliantines, dentifrices, etc. The quantity exported amounted to 150,183 proof gals., against 137,150 in 1908-9 and 152,268 in 1907-8. This makes a total of 1,844,409 proof gals. since the drawback was introduced on January 1, 1889; and the drawback paid to exporters during the twenty-one years has been approximately one million sterling. Great as that return has been, it represents only part of the gain which the drawback has been to the British wholesale drug-trade and the

allied branches, for Colonial orders for tinctures, etc., have brought with them orders for many other classes of goods. We learn that last year the Laboratory examined 17,338 samples of the exported preparations, and

in 215 instances the alcoholic strength claimed was in excess of that found on analysis, and the Board of Customs and Excise called for explanations from the traders concerned. In the majority of cases the discrepancies were traced to loss of spirit by evaporation in stock, or clerical errors on the part of exporters. A considerable number of the samples were examined for methylated spirit, but only in a few cases were traces found to be present. In one case a liniment prepared entirely from methylated spirits was presented for drawback. On investigation, the exporter was found not to have taken the necessary precautions to prevent such a substitution, and was therefore severely penalised.

Other Matters

in the report deserve mention, but space prevents us doing more this week than quoting two exceptionally interesting paragraphs:

A drawback or rebate of duty is paid on tobacco offal (consisting of stalks or other waste material resulting from the various processes of manufacture) . . . generally used for the manufacture of nicotine, and as a basis for the preparations of sheep-dips, insecticides, etc., and when not deposited for drawback is allowed duty-free provided it is "denatured" in accordance with certain prescribed formulae. Samples of the denaturing ingredients, as well as of the finished product, are submitted for test, and must be approved before delivery is allowed. The number of such samples continues to increase, showing that farmers and horticulturists are taking advantage of the facilities afforded for the use of preparations having nicotine as their active principle instead of the arsenical products formerly so much in favour. The number of samples of nicotine and other tobacco preparations amounted to 1,621.

The above is from the Customs Laboratory; and the following refers to a bit of work done for the Local Government Board:

Arising out of suspected frauds in connection with claims for old-age pensions, entries in family Bibles, old letters and certificates have been submitted to us in eight cases, to ascertain, if possible, the date of the entry. In some cases we were able to show from the nature of the ink employed that the writing was comparatively recent, and that the entry had been made for the purpose of producing evidence of age in connection with the claim.

Similar service was done in regard to the detection of attempts to re-use cancelled postage and Revenue stamps. Mention of such things by Dr. Dobbie is a catching method of letting the public know what the Government Laboratories do—if we may judge from the curiosity which has been awakened in the minds of newspaper interviewers.

Sicilian Products in 1909.

A BRITISH Consular report on the trade and commerce of Sicily during 1909, which has been issued recently, will, in view of the calamity of December 1908, be read with unusual interest. The report, written by Mr. Consul Macbean [Cd. 4962-53, price 5d.], is mainly composed of statistics of imports and exports from Palermo, Messina, Catania, Syracuse, Licata, Marsala, Trapani, etc., which show, apart from the important port of Messina, that the volume of business was, on the whole, appreciably less, conditions naturally being aggravated by the earthquake and the still unsolved crises in the sulphur, citrus fruit, and wine industries. There were substantial decreases in the exports of olive and sulphur oils, citrate of lime, essential oils, lemon juice, peel, sulphur, and almonds. Manna, however, was an important exception, exports rising from 82 metric tons to 101 metric tons (of which 13 tons went to the United Kingdom), this product being entirely shipped from Palermo. Sicilians were, however, partially helped over their difficulties by a

splendid wheat crop last year, and it is anticipated that Sicily, once the granary of Italy, will again cultivate this cereal more intensively. On the other hand, no solution has yet been found of the sulphur crisis, judging by the figures issued by the Consorzio Obbligatorio. The loss of the United States market, which formerly took over 100,000 tons annually, has been keenly felt; in fact, the two largest importers of Silician sulphur are now the Italian Continent and France, but Italy herself is mining sulphur, and the consumption of Sicilian is falling off. Many of the smaller mines have been closed down, but the production still greatly exceeds the demand, as may be readily judged by the fact that on July 31, 1909, the Consorzio had a stock of 604,598 metric tons, valued at 1,789,652*l*. The report indicates the steps which have been taken by the Italian Government to bring about amelioration, and this has no doubt, to some extent, been achieved. For instance, we learn from a report presented to the Italian Parliament by Sig. Cocco-Ortu, and published on March 13, 1910, that "sales in the open market and for shipment (by which credit was abused and artificial abatements were made) have now ceased. New enterprises have decreased, no new mines have been opened, and the least profitable have been abandoned." These eliminations should make for prosperity, but opinion in Italy does not entertain much hope, as it is not in the power of the State to prevent international competition, which is at the base of much of the trouble.

The troubles of the Camera Agrumaria or Citrus Chamber are next dealt with by Mr. Consul Macbean, but these are familiar to readers of *THE CHEMIST AND DRUGGIST*, and he tells us nothing new. The shrinkage in the exports of citrate of lime last year is well illustrated by the following Custom-house statistics:

From	1907	1908	1909
	M. Tons	M. Tons	M. Tons
Palmero	825	1,430	589
Messina	4,349	4,737	12
Catania	—	—	1,320
Syracuse	120	91	267

The United Kingdom's share of the above was small, being 90 tons from Palermo, 6 tons from Messina, and 219 tons from Catania. In addition, Palermo exported 286 tons lemon and citron juice (107 tons 1908), 79 cwt. lemon oil (187 cwt. 1908), 3,180 cwt. tartar and wine-lees (497 cwt. in 1908). Turning to Messina, the exports of lemon and orange oils amounted to 56½ tons, of which 20 tons went to the United Kingdom, and of the 12 tons of citrate in the above table, 6 tons went to the United Kingdom; 43 tons of concentrated lemon-juice were also exported, all of which were sent to the United Kingdom. The essential-oil business last year was diverted to Catania, whence 334 tons were shipped, of which 34 tons were to the United Kingdom, 2,296 tons of wine-lees and 40 tons of tartar were also shipped from that port. In fact, Catania benefited at the expense of Messina; but with the restoration of the latter port, the bulk of Eastern Sicily's trade will continue as in the past to be divided between those two ports. Great confidence exists that Messina will recover its former prosperity in a by no means distant future, and at the time the consular report was written a new city was springing up. Among the new industries is the manufacture of liquorice-juice, for which two factories have been established, one in Messina itself and one at

Policara, while there is also to be an important factory for the manufacture of citric and tartaric acids and other chemical products, which has already been referred to in this journal.

Shops (No. 2) Bill.

THE interest in regard to the Government Bill to consolidate, amend, and extend the Shops Regulations Acts, 1892 to 1904, is growing throughout the country, but it has been rumoured that it is not the intention of the Home Secretary to proceed with the measure. Mr. Churchill has accordingly felt it necessary to write a letter, in which he says:

"There is certainly no intention on the part of the Government to drop or shelve the Shop Hours Bill. The Prime Minister takes a great interest in the question and is most anxious to see the Bill become law. The Master of Elibank has arranged that the Shop Hours Bill shall be put down for its second reading on November 15, the very first day that Parliament assembles. In spite of the uncertainty which unavoidably enshrouds the course, which affairs will take after the meeting of Parliament, there ought to be no difficulty, in any event, in putting the Shop Hours Bill through, and I for one shall be very disappointed if it has not received the King's assent before we eat our Christmas dinners."

One of the chief objections urged against the measure is that it is not universally applicable. The Lancaster Chemists' Association made this objection in a communication to the Pharmaceutical Council, which was dealt with at the last meeting. The objection referred specially to the supposed exemption of one-man shops, and not to the trades and businesses exempted from the weekly half-holiday and Sunday closing provisions--viz.:

The sale by retail of intoxicating liquors for consumption on or off the premises.

The sale of refreshments, including fruit.

The sale of tobacco and other smokers' requisites.

The sale of bread.

The sale of confectionery.

The sale of newspapers and periodicals.

The business carried on at a railway bookstall on or adjoining a railway platform.

The business carried on at a railway refreshment-room.

The sale of motor or cycle accessories.

The sale of milk and cream.

There is nothing in the Bill regarding one-man shops, except the provision that it is not to extend to any rural parish with a population of less than 1,000, but it is provided, even in that case, that where rural parishes are close to borough and urban districts orders may be made in respect to them. In Clause 23 "shop assistant" is defined, and is said not to include members of the family of an occupier of "a shop maintained by him and dwelling in a building of which the shop forms part or to which the shop is attached." This appears to have given rise to the supposition that the Act will not apply to one-man shops—for example, to a chemist who is assisted only by members of his family and lives on the premises. The exemption provided, however, is only as regards the hours of employment in such shops (not to their closing), and if it can be shown that the son or daughter of a chemist assisting him in the business is remunerated to an extent equivalent to his or her maintenance, the provisions applicable to "shop assistants" will also apply to the members of the family. A more serious objection is that urged against the compulsory weekly half-holiday and Sunday closing. The clause covering this would not prevent customers being served with medicines and medical and surgical appliances, but it is felt that the public is scarcely ripe for a universal closure of shops for a half-day per week while other commercial and industrial work is going on. We understand that strenuous objection is to be made to this

provision. The clause provides that the local authority may fix the day on which a shop is to be closed, different days being fixed for the various classes of shops and different days for the several parts of the district. Where no such order exists, the owner of a shop may choose upon which day he shall close. Considering the general exemption of trades and businesses already specified, it seems that some attempt is made in the Bill to meet the objection as to public inconvenience, but we may point out that the exemptions leave shopkeepers with a grievance, in so far as the business now carried on at a railway bookstall is of a very general character. It is not unusual to observe on such stalls articles (*e.g.*, perfumes) commonly sold by chemists, and many articles sold by drapers, etc., and there seems no reason why such business should not be extended so as to include the more popular things commonly sold at the closed shops. This should be looked into when the Bill is going through Parliament.

Some Canadian Bulletins.

The recently issued Bulletins of the Laboratory of the Inland Revenue Department, Ottawa, Canada, include No. 205, arsenate of lead; No. 206, nitrite reacting nitrogen in flour; and No. 207, beef, iron and wine. Lead arsenate as an agricultural insecticide is replacing to a certain extent Paris green, and the Department issued instructions for the purchase of lead arsenate. Only eighteen samples were true to name, the inspectors in some cases accepting hellebore and pyrethrum instead of the insecticide which they were instructed to buy. The physical condition of the article offered for sale was found to vary from dryness to a water-content amounting to 49 per cent. The mean percentage calculated as arsenic (As_2O_3) was found to be 27.09 and of lead oxide (PbO) 66.54 on the dry sample. The Bulletin No. 206 reviews the question of the sale of flour that has been bleached by oxides of nitrogen, and supplies data for considering the question of limiting the nitrite-reacting nitrogen in flour. Beef, iron and wine (*vinum carnis et ferri*) is dealt with in Bulletin No. 207. The chief analyst takes the formula in the "National Formulary" as the model, and proceeds to show that the seventy-six samples which were examined varied within very wide limits as regards the nitrogen, iron, and alcohol:

Total solids	...	...	from 7.20 to 26.22 per cent.
Nitrogen	...	...	" 0.002 to 0.722 "
Ash	...	...	" 0.180 to 1.488 "
Iron (Fe_2O_3)	...	...	" 0.050 to 0.480 "
Alcohol	...	...	" 6.67 to 18.77 "

The Bulletin states that the wine has a large sale, and is popularly believed to possess valuable tonic properties.

Territorial Pharmacists.

In the discussion on a paper by Lieut.-Col. E. M. Wilson before the Army, Navy, and Ambulance Section of the British Medical Association, the question was raised of the position of pharmacists in the Territorial Army. No special reference was made to pharmacists in the paper, beyond a suggestion that "dispensers" scattered about the country should be located in case of need. Surgeon-General Evatt, whose interest in pharmacists is well known, said the pharmaceutical profession should be specially dealt with, and a defined status given to its members on joining the Territorial Army. Major Connell said "there seems to be a desire on the part of members of the Pharmaceutical Society who are enlisted in general hospitals to obtain commissions, but he felt very strongly that it would serve no good purpose to grant such commissions." The reader of

the paper said that dispensers can join the St. John Ambulance Brigade as supernumeraries and enter the Home Hospitals Reserve; or enlisting into the Territorial Forces R.A.M.C., could qualify for promotion. They could join category B of the Special Reserve, and then on mobilisation they would be employed in the field with their rank in the Territorial Forces. A knowledge of medical returns and administration in connection with dispensing is all that is required, and this examination has been passed by several qualified pharmacists in the R.A.M.C. (T). He also referred to the dispensers who enlisted into the Army during the South African war as privates and were subsequently given promotion. This discussion serves to show how little the services of pharmacists are valued by those who should be able to appreciate what it means to have their dispensing accurately and intelligently performed.

International Congress of Pharmacy.

The Organising Committee have issued a further circular, in which are given particulars of the outing to Antwerp on September 4, which is an alternative excursion to the Ostend trip. The participants will leave Brussels at about 9 A.M., and will be met at Antwerp and be taken to see the sights of the city. At midday a reception will be held in the Hôtel de Ville, and the honorary members and correspondents will be elected. At one o'clock there will be an excursion on the Government boat *L'Emeraude* on the Escaut (Schelt), luncheon will be served on board, Antwerp will be reached on the return journey at about six, and at eight there will be a concert in the Zoological Gardens. These festivities are in connection with the seventy-fifth anniversary of the foundation of the Society of Pharmacy of Antwerp. In regard to the Ostend trip, it is asked that application be made before August 28 to M. Staef, pharmacien, 108 Rue Neuve, Brussels. Members will note that evening dress must be worn at the rout at the Hôtel de Ville, Brussels, on September 6. The price of the tickets for the banquet on September 5 has been fixed at 7f. (without wine); the function will take place at the Taverne Royale. Applications for tickets must be received by September 3. The offices of the Congress will be at the Palais des Académies, where members should apply for their membership cards, etc. These cards admit members gratis to the Exhibition during the Congress, and also entitle parties to a reduction on visiting the Exhibition of Ancient Art.

PERFUMERY IN ASIA MINOR.—The imports of perfumery, including toilet soaps, lotions and powders, into Smyrna increased from 27,000 kilos. in 1900 to 74,620 kilos. in 1908, the largest part of which came from France. Germany came next with about a third as much, followed by Austria, Britain, and Italy. Locally only small quantities of toilet waters, such as cheap eau de Cologne, are manufactured. Perfumes are usually imported packed in boxes containing 12 to 15 small 1 or 2 oz. bottles. Toilet soaps are packed in cardboard boxes of three tablets. Payment is effected by draft four months from date of invoice. The purchaser, however, only accepts a draft after he has received and examined the goods. Manufacturers represented by agents in Smyrna send their travellers once a year to work the place. French goods are in repute on account of their quality and appearance, but the German article, although not equal in point of quality, has a larger sale on account of its lower price. In order to gain a foothold on the Smyrna market, the first requisite would be the appointment of a respectable and capable agent, and, further, that Smyrna, and indeed the whole of the Levant be visited by representatives and worked by advertising.

Essential Oil of Copaiba.

DEUSSEN AND HAHN have published an important paper ("Chemiker Zeitung," 1910, 873) on this essential oil. They point out that, according to Wallach, oil of copaiba contains the sesquiterpene caryophyllene, which also occurs in clove oil. It has already been shown that "caryophyllene," as known in literature, consists of three isomeric bodies— α -caryophyllene, which is probably inactive; and β - and γ -caryophyllene, which are highly levorotatory. Caryophyllene-nitroschloride, melting at 177°, and the nitrosate, melting at 162°, are derivatives of the α hydrocarbon. The blue-coloured nitrosite, melting at 115°, is a compound of the hydrocarbon. An attempt has now been made to determine which variety is present in oil of copaiba. The sample used for investigation was distilled by Messrs. Schimmel & Co. and had the following characters: Specific gravity, 0.9003 at 19.5°; optical rotation, $-14^{\circ} 55'$. On rectification by steam, the gravity became 0.9007 at 21°, and the optical rotation $-14^{\circ} 44'$. The oil was distilled *in vacuo* repeatedly, and the following fractions obtained at 15 mm. pressure:

Boiling-point	Rotation	Boiling-point	Rotation
124-128°	$-11^{\circ} 18'$	135-137°	$-17^{\circ} 36'$
128-129°	$-12^{\circ} 16'$	137-140°	$-19^{\circ} 55'$
129-132°	$-14^{\circ} 28'$	140-145°	$-22^{\circ} 35'$
132-135°	$-16^{\circ} 31'$		

These figures confirm the observations previously recorded, that the optical rotations of the fractions of oil of copaiba rise with the boiling-point. The opposite, however, is the case with the caryophyllene obtained from oil of cloves, the rotation falling in the successive fractions. Combustion of the seven fractions above proved that all, except the last, were practically pure sesquiterpenes. The last fraction contained a little oxygen, owing to the presence of a trace of the resin acids of the original balsam. Attempts were made to prepare the crystalline nitrosochloride from the various fractions, but in no case was a yield of more than 5 per cent. obtained. The following is a summary of experimental results with caryophyllene obtained from oil of cloves on fractional distillation (four samples):

Rotation of Original S.s. quiterpene	Fraction	Boiling-point	Rotation	Yield of Nitrosochlorate
-15.43°	1	128° (17 mm.)	-21.46°	trace
	2	128° (17 mm.)	-21.50°	0.3%
	3	131° (19 mm.)	-19.98°	2.4%
	4	95° (4 mm.)	-19.20°	2%
-14°	1	133° (13 mm.)	-16.96°	—
	2	126° (5 mm.)	-16.75°	—
	3	123° (16 mm.)	-16.61°	—
	4	126° (16 mm.)	-16.30°	—
	5	126° (15 mm.)	-15°	—
-15.43°	1	134° (18 mm.)	-14.77°	2%
	2	130° (15 mm.)	-12.75°	3.2%
-9.10°	1	130° (15 mm.)	-10.50°	4.4%
	2	130° (14 mm.)	-9.62°	4.5%
	3	130° (14 mm.)	-8.52°	3.7%
	4	130° (14 mm.)	-7.46°	6%
	5	130° (14 mm.)	-6.92°	11%
	6	132° (14 mm.)	-5.82°	12%
	7	122° (16 mm.)	-5.34°	12.2%
	8	140° (16 mm.)	-4.2°	20.8%

These figures afford strong evidence that the sesquiterpenes in the two oils are not identical. From a comparison of the molecular refractions it appears that the sesquiterpenes of copaiba oil are bi-cyclic, which does not seem to be the case with those from oil of cloves.

Medical Gleanings.

The Sour-milk Cure.

DURING a discussion on treatment with lactic-acid organisms at the recent meeting of the British Medical Association, Dr. O. F. F. Grünbaum stated that the main advantage gained by the administration of the lactic-acid bacillus is that the antiseptic is manufactured at the place it is needed, and does not run the risk of being absorbed before it reaches that part. Persons suffering from toxæmia and irritability of the intestinal mucosa caused by some micro-organism which cannot flourish in an acid medium are benefited by the treatment, as also are certain individuals who suffer from *maladie imaginaire*. Dr. Tanner Hewlett said that the tablets should be freshly prepared and that lactic cheese should be eaten as soon as possible after preparation. Dr. A. Bryce spoke of the risk of the indiscriminate use of curdled milk, but Dr. Bond and Professor Bradbury both referred to excellent results that have been achieved by the administration of lactic-acid bacilli.

Whooping-cough.

DR. T. ZANGGER, of Zürich, at the recent meeting of the British Medical Association, read a paper on the therapeutics of whooping-cough. In this disease medical men have not only to deal with a contagious disease of bacillary origin, but also with distinctly nervous symptoms of a reflex nature. To combat the infective factor he recommended quinine hydrochloride in a 1 to 2 per cent. solution in doses of $2\frac{1}{2}$ fluid drachms administered three times a day—at 8 A.M., 2 P.M., and 6 P.M. Euquinine, first recommended by Professor von Noorden, came next in efficacy and is slightly bitter, and almost non-irritant for the stomach. It is prescribed in doses of 2 to 4 grains three times a day. To combat the nervous element of whooping-cough he recommended simple hydropathic packs applied two or three times, especially towards the evening and night for from one to four hours. They should reach from the armpits to the knees and be covered with flannel. The temperature of the water should be from 52° to 60° Fahr. The sedative effect of these packs is remarkable. The result of this combined treatment has been satisfactory in upwards of two hundred cases, spreading over a number of years. The convulsive stage has been shortened in medium and severe cases to twenty, fifteen, and even ten days. There has been rarely more than twenty attacks of cough in twenty-four hours, and the number of attacks and their intensity decreased from day to day. There have been no fatal cases, no complications, and not one case of bronchopneumonia.

Alcohol Injections

into a nerve-trunk cause immediate paralysis, both motor and sensory, of its distribution by destroying the nerve-fibres at the point of injection. Dr. Wilfred Harris, before the British Medical Association, therefore proposed this method of local destruction of a sensory nerve by alcohol injection as eminently suited to arrest neuralgic pain due to sensory impulses generated at the periphery of the nerve, such as tic douloureux, painful spots in fibrositis, rheumatic neuralgia, supra-orbital neuralgia, etc. During the last two years Dr. Harris has used Schüssler's method of alcohol injection of the main branches of the trigeminal nerve in forty-one cases of tic douloureux, giving complete relief in thirty-eight cases from all pain for periods varying from four and a-half to fourteen months. When the pain recurs reinjection gives an even longer immunity from pain. In addition, he has used deep injection of alcohol into the tissues for the relief of the pain in over 150 other cases of persistent neuralgia, including supra-orbital neuralgia, interscapular, lumbar and sacral fibrositis, rheumatic costal neuralgia, and so-called intercostal rheumatism. The relief given in a large number of these cases is almost instantaneous, becoming apparent as soon as the pain of the injection has passed off, in half a minute or less. Great care must be taken not to inject alcohol into the sciatic nerve, or paralysis of the leg will certainly follow. In thirty-four cases of chronic sciatica he has used a modification of Lange's infiltration method of the nerve with warm normal saline solution and cocaine. He used a special hollow

needle 9 cm. long and 0.7 mm. in diameter. After finding the nerve, 2 c.c. of a 1.5 per cent. solution of cocaine is injected, and after fifteen seconds 100 c.c. of warm saline solution is injected into the nerve. The patient should not be allowed to get up for at least twelve hours after the injection. He never uses the method in acute sciatica of less than five weeks' duration.

Morphomania Treatment.

DR. CRICHTON MILLER, at the annual meeting of the British Medical Association, described a combined medicinal and moral treatment of the morphine habit. The method employed is as follows: There should be a course of nine weeks in a nursing home or similar institution. During the first three days the patient should get a diminishing number of injections, of diminishing strength. Before each injection he should take a draught containing 5 grammes of sodium bromide. By the end of the third day both bromide and morphine would be stopped, and the patient would be in a comatose or semi-comatose condition, which would last from three to six days more. During all this time the patient should be roused to take milk at regular intervals. When the effects of the bromide begin to pass off there will be in all probability a certain amount of mental confusion, including hallucinations and delusions of persecution. These will soon pass off. When the patient appears to be sufficiently sensible, efforts should be made to hypnotise him, and his lethargic state will materially assist in this. Suitable suggestions must be made without waste of time, lest the craving should reassert itself before the mind is sufficiently influenced. This is the critical point of the whole cure. As soon as possible patients should be brought into one room and hypnotised collectively. During this period, from the second to the end of the seventh week, each patient should be strictly supervised, and no access to drugs allowed. During the eighth and ninth weeks he should be allowed to keep his morphine and syringes. The hypnotic sittings should be reduced in number, and should have special reference towards teaching the patient to put himself to sleep. Once acquired, this power would serve to give the patient in the future a ready refuge from worry or pain or anything else that might otherwise lead to thoughts of morphia.

Alcohol Vapour and Oxygen Inhalation.

DR. W. H. WILLCOX recently read a paper on the therapeutic use of alcohol vapour mixed with oxygen. When a current of oxygen is passed through absolute alcohol a definite amount of alcohol vapour is absorbed by the oxygen; this mixture has been found to be a very valuable cardiac stimulant. The apparatus consists of a wash-bottle with an inlet and exit tube. The inlet tube should dip about half an inch or so below the surface of the contained alcohol. The results of a large number of chemical experiments showed that it was best to use absolute alcohol in the wash-bottle, through which the oxygen was bubbled, since with rectified spirits, brandy or whisky, much smaller amounts of alcohol vapour are carried over by the oxygen. With absolute alcohol at the ordinary temperature of the air, the oxygen which is bubbled through it would contain from 4 to 5 per cent. of alcohol vapour (from 1 to 2 grains of alcohol per litre). It is necessary for the oxygen to be delivered in a rapid stream; and when administered in this way, after from three to five minutes the full therapeutic effect is obtained, and the effect lasts for several minutes. In cases of severe cardiac failure the mixture of oxygen and alcohol vapour should be given for five minutes every half-hour. It was pointed out that the alcohol vapour is absorbed by the lungs and carried direct to the heart, on which it produces its direct action. The administration is pleasant and invigorating to the patient. Cases on which the remedy has been used with great benefit are: pneumonia, with cardiac failure; cases of heart-failure following surgical operation; angina pectoris; asthma, with cardiac failure; septicæmia; typhoid fever; myocardial degeneration; dilatation of the heart; valvular disease of the heart; collapse after epidemic diarrhoea; cardiac failure after chloroform anaesthesia, etc. In many cases it appeared that the mixture of oxygen and alcohol vapour by its stimulating effect on the heart had tided the patient over a dangerous period of illness, and so saved life.

A Quaint Elizabethan Surgeon.

IN the year in which the Barber Surgeons' Company was incorporated by royal charter, 1540, was born George Baker, who was destined to be elected its Master fifty-seven years later. Little is known of his life save that he had a considerable practice in London and that he was attached to the household of the Earl of Oxford, whom, in a dedication, he calls "my singular good Lorde." But he has left several books—most of them translations—on surgery and allied subjects, and from the remarks of his friends, in prefaces and elsewhere, it is clear that his position was one of high repute. The writing of prefaces, by the way, must have been a familiar exercise to Baker himself, who wrote several, including that to Gerard's "Herbal."

The earliest (and, in some respects, the most interesting) of his works is entitled "The Composition or making of the moste excellent and pretious Oil called Oleum Magistrale. . . ." It is dated 1574, and was printed, the colophon tells us, at "the long Shop adjoining unto Saint Mildred's Church in the Pultrie." The disclosure of the formula is preceded by a long-winded account of its history, it having come from Spain, where it was once the secret of a Moor named Aparice. The Moor, an irregular practitioner, and perhaps a quack, was the object of a good deal of persecution on the part of Spanish doctors, who had him imprisoned for unlawful practising. The oil, however, was in great request, and at his death Aparice left the recipe to his wife, from whom, it may be guessed, it was obtained without much difficulty: the worthy widow received a consideration of 500 "duckets." In face of the almost miraculous virtues attributed to the specific, it is amusing to find that it was a quite commonplace compound of wine, oil, Venice turpentine, and equally well-known materia medica, the manipulation of which consisted chiefly in boiling and stirring with a "spattle." Wounds were to be dressed with it twice daily—at eight and three in summer and at nine and four in winter—and the patient was to turn over (or be turned) frequently. Baker was quite aware of the mysterious dignity pertaining to the use of Latin, for he artfully remarks, "As for the names of ye simples: I thought it good to write them in the Latin as they were, for by the searching of their english names the Reader shall very much profit, and another cause is that I would not have every ignorant asse to be made a Chirurgicalian by my Book, for they would do more harme with it than good."

The most important, perhaps, of Baker's literary efforts was his edition (partly translated by himself) of Guy of Chauliac's "Surgery," a classic which, first published in 1500, appeared in several languages, and held its ground till the early part of the eighteenth century. The English version was issued in 1579, and had prefixed a prayer "necessary to be sayde of all Chirurgicaliens"—how often, it is not stated. It is a systematic treatise dealing with practically every department of the art, from the anatomy of "the skinne or the lether" to the preparation of a liniment for scurf—described as "small branny scales in the head." Some of its information is very quaint. In examining a patient for symptoms of leprosy, for instance, the doctor is directed to ask, among other things, "whether his dreams be feareful or not, and whether he seeth black things, and divels." The headings of the formulæ, too, furnish pleasing turns of phrasing, such as "An Electuarie for the Palsie, and Crampe, happening to wounded Patients beeing voyde of learned counsaile"; "A Liniment to dissolve the hardnesse of the legges after the Goute"; "A Liniment very good for a member that is wholly consumed, although it have been so a long time."

One of Baker's books, "The Newe Jewell of Health," had the distinction of being printed (under another title) a second time. Its chief feature is its advocacy of the merits of distillation; both author and translator appear to have had a predilection for the process, and the latter goes out of his way to recommend certain London distillers—one, John Hester, being described as "a paynfull travelyer [i.e., a painstaking worker] in those matters." Like the other treatises, it contains many pretty sentences worth searching out; in preparing the "water of a capon," for example, we are instructed that the bird is to be "much chased up and

downe, until he bee wearied," and then "sodainlie strangled." In the circumstances, the capon probably welcomed the strangling.

A City Warehouse.

ONE day recently a gentleman came into our office and, handing the manager a printed paper, asked, "Is that any use to you?" It was a leaf from the "Illustrated Times" of October 27, 1860, with two fine wood engravings



INTERIOR OF A CITY WAREHOUSE.

on p. 263; one "London Sketches.—No. 1. Interior of a City Warehouse. (From a drawing by McConnell)," and the other "Scenes from the New Opera 'Robin Hood.'" A glance at the first revealed a specie-jar and other druggists' sundries, and the letterpress began thus:

"I have seen the West-end, the parks, the fine squares; but I love the City far better. The City seems so much more in earnest; its business, its rush, its roar, are such serious things, sights, and sounds. The City is getting its living—the West-end but enjoying its pleasure." This oft-quoted passage from "Vilette" forms an appropriate introduction to our description of the large establishment in which our artist's sketch was taken. If the reader cares to know how the City gets its living, he cannot do better than accompany us to the warehouse of Morgan Brothers, the well-known druggists' and ironmongers' sundrymen, in Bow Lane. To enumerate the different articles which these merchants keep in stock would be a task scarcely less arduous than that of cataloguing the books in the Museum library. They profess to deal in all goods retailed or used by chemists and ironmongers, except drugs, chemicals, and metals; but they undertake to supply anything a customer may choose to order. A fire-engine, a suit of chain armour, a pair of greyhounds, guinea-pigs, and artificial eyes for a stuffed fox, are a few of the strange things they have lately transmitted to customers living in out-of-the-way places.

When the lumbering broad-wheeled wagon and the sluggish canal-boat were used for the conveyance of goods, the country tradesman found it cheaper and more convenient to procure every kind of article from one wholesale dealer or merchant factor in town. At the present day the store-keepers of our Colonies adopt the same system, and obtain everything they require through one English house. We mention this fact to account for the unusually heterogeneous nature of the articles which appear in our engraving of Morgan Brothers' order-room.

We were glad to avail ourselves of the opportunity of reproducing the engraving, for it represents part of the warehouse of Messrs. Morgan Bros., proprietors of this journal, when they were export merchants and druggists' sundriesmen fifty years ago. It will also interest druggists' sundriesmen of to-day to observe the style of the workers of 1860. The original wood-engraving is 8 in. wide, and it is accompanied by letterpress which would occupy more than a page of our space. Copies of such papers as the "Illustrated Times" are to be picked up occasionally, and they are worth buying on account of the wood engravings they contain. That art is passing away except for illustrating engineering catalogues and the like, and in a few years comparatively, books containing wood engravings will have an enhanced value.

Dental Notes.

By A Licentiate in Dental Surgery.

Cocaine-and-Adrenalin Injection.

MR. S. D. HEYS, L.D.S., Leeds, finds the following to be an excellent combination of cocaine and adrenalin for all dental purposes :

Cocaine hydrochloride ...	9.5 gr.
Sodium chloride ...	8 gr.
Adrenalin chloride ...	28 min. of a 1,000 solution
Sterile water ...	2 oz.

This is roughly a 1-per-cent. solution.—*Brit. Dent. Journ.*

Effect of Drugs on the Teeth.

DR. HAROLD AUSTEN, in a paper read to the Odontology Section of the British Medical Association, stated that two classes of drugs appear *prima facie* to be potential sources of caries :

1. Acids, administered internally or used as local applications to the fauces. Very dilute solutions of weak acids, if applied continuously, had been shown by experiment to appreciably destroy the enamel. But in the mouth acid medicines and gargles are not applied continuously, but very intermittently, and, in the case of fluids, mostly to the exposed surfaces, which are constantly washed by the saliva. All modern research tends to prove that the acids really injurious to the teeth are those generated *in situ*, in places which do not admit of natural cleansing, by the fermentation of the remains of carbohydrate foods.

2. Mercurials when administered in infancy have been credited with the production of hypoplasia of the teeth, the so-called honeycombing. The evidence for this is far from convincing. If, however, the point were proved, it would be an instance of a medicine causing predisposition to decay, to which hypoplastic teeth are very liable. Mercurials administered in large doses have long been known to cause well-marked disturbances in the associated tissues, the gums, and even bone. It is conceivable that mercury acting in this way, where there have been actual ulceration and permanent loss of tissue, might cause a predisposition to caries at the necks of the teeth. Lead, bismuth, silver, or copper, being drugs partly excreted by the oral mucous membrane, have been credited with occasionally producing similar effects to mercury in septic mouths. The only treatment for the correction of the effects of these drugs, if any is required, seems to be to maintain complete cleanliness of the mouth, and to neutralise the effects of acids taken by the immediate use of an alkaline mouth-wash.

Character by the Teeth.

THE character of a person may be judged in many ways, such as by the face, hands, style of dress, manner of walking, etc., but how many people could judge a person by his teeth? Comparatively few, unless one with a dental training, and even then only after careful study. It is an undeniable fact, however, that it can be done. Take the case of a man whose teeth are well worn at the edges. This denotes honesty and affection. He is ready to do anyone a good turn, and is also very fond of home life, preferring a quiet evening at home to much social gaiety. Prominent or protruding teeth indicate a stubborn, dogmatic disposition. People with such teeth will be found difficult to get on with. They will loudly give their opinions on any subject, and will stick to them no matter how far wrong they may be. Where the teeth are spaced it usually indicates a strong and affectionate character. These people make the best of friends. As an opposite to this, a man with long, even, narrow, and pearly teeth is not to be trusted. This man may be friendly to all he meets, but he is what may be termed double-faced, deceitful, and untruthful. A woman with fragile-looking teeth, uneven and discoloured, is sensitive and nervous, but restrains her nervous disposition by sheer force, however highly strung she may be. Small fragile-looking teeth in a man denote lack of stamina or strength of character; he is easily led by anyone mentally stronger than himself. A woman with square, regular, white teeth is cold, shallow, and very selfish; a man with such teeth is unselfish to a degree, undemonstrative, and has a good and tender disposition. These, then, are some examples of character-reading by the teeth; but although the above may generally be correct, it must always be borne in mind that there are exceptions in everything, and the teeth especially are liable to so many malformations in

structure and position (only recognised by the dentist), through illness or other causes, that it might be unfair for anyone to judge solely by a glance at the teeth. In a doubtful case of character-reading by the face, etc., the teeth might be studied as a last corroboration to any decision otherwise come to.

Sterilisation of Solutions.

THE sterilisation of solutions for hypodermic use is prescribed by the Swiss and Italian Pharmacopœias, and will most likely be adopted by others. The following are the instructions given in the Pharmacopœias named :

The Swiss Pharmacopœia directs that bottles and metallic objects for such solutions should be sterilised by heating (1) for two hours in the dry-air cupboard at 160° C.; (2) in the autoclave at 115° C. for fifteen minutes; (3) exposure to a current of steam for thirty minutes; or (4) by boiling for fifteen minutes in water or in soda-solution (1:100). Solutions of substances which are not decomposed by exposure to a relatively high temperature should be sterilised either in a specially constructed steamer or in an autoclave; in the latter case sterilisation is accomplished within fifteen minutes at 115° C. Otherwise the solutions must be exposed to a current of steam for one period of thirty minutes, or for fifteen minutes daily on three consecutive days. The glass-stoppered bottles to be used should first be rinsed out with 1-per-cent. hydrochloric acid, then with water. Corks should not be used, and rubber stoppers should be boiled. After sterilisation each bottle should be covered with parchment paper sterilised by exposure to steam. Solutions of substances which are decomposed by heat are rendered *almost* sterile by the following procedure: All the necessary utensils for weighing are immediately before use cleaned with sterile cotton-wool and alcohol, and then with ether. The requisite amount of substance is then dissolved in sterile water contained in a sterilised glass-stoppered bottle. If the solution has to be filtered, this is done either by means of a funnel and paper treated by one of the methods described for bottles, or through a Chamberland or Berkefeld filter into a second sterilised bottle. Filled ampoules are to be heated once daily to 60° to 70° C. for three days. In the case of emulsions prepared with glycerin or oil, the medium is first sterilised by itself and when cool the drug is added, or the drug may be rubbed up in a mortar previously treated with alcohol and ether with the sterilised oil or glycerin and poured into the sterilised glass-stoppered bottle. Surgical dressings are sterilised by treating them in an autoclave at 115° C. for fifteen minutes on two separate days, or by exposure to a current of steam for thirty minutes.

The Italian Pharmacopœia is somewhat more explicit in some points. Ordinary hypodermic solutions are to be sterilised by exposure to air at a temperature of 160° C. for half an hour, or by treatment in an autoclave. Solutions of substances which are decomposed by a temperature of more than 100° C.—viz., cocaine hydrochloride, morphine hydrochloride, atropine salts, quinine, eserine sulphate, strychnine, adrenalin, cacodylates, and stovain—are to be prepared with sterile water and the container then placed in a water-bath for fifteen to twenty minutes, so that the level of the boiling water in the bath corresponds to that of the solution in the bottle. Solutions of substances decomposed at about 100° C. are exposed to a temperature of 55° to 60° C. for one hour daily on four consecutive days. This applies to serums, organo-therapeutic preparations, ergotin, and glycerophosphates. In the case of solutions or emulsions for hypodermic use prepared with oil, the oil is first to be treated with alcohol (95-per-cent.) to remove the oleic acid. Oily solutions of calomel, yellow oxide of mercury, lecithin, and camphor are to be prepared with sterile materials, then placed in a boiling-water bath for ten minutes or in an air-bath at 100° C. An interesting requirement is exacted by the Italian Pharmacopœia as regards the glass of the containers for hypodermic injections: Ten to twelve ampoules or five to six bottles are filled with a clear solution of 1-per-cent. mercuric chloride, then sealed. They are then left in an autoclave at 112° C. for half an hour, at the expiration of which time no brownish turbidity should be perceptible.

For this branch of work the German medicine tariff authorises the following charges :

Sterilisation of a bottle or a medicine up to 100 grams ...	3½ pfennigs
Sterilisation of a bottle or a medicine of over 100 grams ...	6 "
Sterilisation of a utensil ...	3½ "
For filling, sealing and sterilising ampoules, 3 or less ...	9 "
Every further ampoule ...	1½ "

New Books.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Adams, John. *A List of Synonyms of Irish Algae, with some Additional Records and Observations.* Swd., 1s. (Williams & Norgate.)

Atkins, W. R. Gelston. *Cryoscopic Determination of the Osmotic Pressures of some Plant Organs.* Swd., 6d. (Williams & Norgate.)

Clough, W. T. *Elementary Experimental Electricity and Magnetism.* 7½×4½. Pp. 264. 2s. 6d. (Methuen.)

Matriculation Chemistry Papers, from January 1894 to June 1910. With full solutions to the Paper of June 1910. 8vo. 1s. 6d. (Clive.)

Miller, Christy, and Thresh, May. *The Mineral Waters and Medicinal Springs of Essex.* 8½×5½. Pp. 73. 7 illust. 2s. 6d. net. (Simpkin, Marshall & Co.) [This is one of the special memoirs of the Essex Field Club, Stratford. It is divided into sections: (I.) Introductory remarks; (II.) bibliography; (III.) particulars of each Essex mineral spring; (IV.) geological considerations and addenda. Dr. J. C. Thresh has assisted in the chemical part of the book. Some twenty-four mineral springs are described in detail, and in a very interesting manner. Practically all the springs are disused at the present time, although most of them were formerly much appreciated on account of their medicinal virtues, which chemical analysis shows to be due to the iron and magnesium sulphate in solution. The book is pleasantly written, and the information given is trustworthy.]

Milne, R. *A Plea for the Home Treatment and Prevention of Scarlet Fever.* 8½×5½. Pp. 80. 2s. (Nisbet.)

Moore, F. J. *Outlines of Organic Chemistry.* Cr. 8vo. 6s. 6d. net. (Chapman & Hall.)

Proceedings of the Missouri Pharmaceutical Association, 1910. 9×5½. Pp. 177. Illus. (Dr. H. M. Whelpley, 2342 Albion Place, St. Louis, Mo.) [Contains the proceedings at the annual meeting held at Maryville in June, the constitution of the Association and roll of members, also the annual report of the Missouri Board of Pharmacy. Includes several useful papers.]

Rees, J. A. *The Grocery Trade: Its History and Romance.* 2 vols. 9×5½. Pp. 306, 438. 21s. net. (Duckworth.)

Rittenberg, Max. *Everyone has Something to Sell.* 6½×4½. Pp. 122. 1s. net; cloth, 1s. 6d. net. (Guilbert Pitman.) [A well-written and useful booklet with an unwieldy title. It contains many shrewd and valuable hints to business-men in all walks of life, and the points are placed logically and in concise and agreeable form. Taken generally, it is a distinctly profitable and agreeable shillingsworth for anyone who has anything—goods, brains, advertising-space, or other—to sell. And who has not?]

Smith, J. W. *The Law of Joint Stock Companies under the Companies (Consolidation) Act, 1908, with Explanatory Notes.* 7×4½. Pp. 277. 2s. 6d. net. (Wilson, 54 Threadneedle Street, London, E.C.) [An explanation of the provisions of the Companies (Consolidation) Act, 1908, which replaced the seventeen Acts relating to company matters from 1862 to 1907. The author pays a tribute to the excellent manner in which the Acts have been consolidated. The book is very well arranged, and is a capital exposition of an Act which is of great importance to a large section of the trading community.]

Thorpe, Sir E. *History of Chemistry.* Vol. 2. 1850 to 1910. Cr. 8vo. Pp. 160. 1s. net. (Watts.)

Tibbles, W. *Food and Hygiene: a Treatise upon Dietetics and Hygienic Treatment.* 8×5½. Pp. 684. 5s. net. (Rebman.)

Walker, Percy H. *Some Technical Methods of Testing Miscellaneous Supplies, including Paints and Paint Materials, Inks, Lubricating Oils, and Soaps.* 9½×5½. Pp. 68. (Government Printing Office, Washington, U.S.A.) [This is a revision of Bulletin No. 109 of the Bureau of Chemistry of the U.S. Department of Agriculture. It explains the methods of analysis for miscellaneous supplies as carried out in the Contracts Laboratory of the Bureau. The methods adopted for iron-tannin inks may be taken as an example; here are determined the sp. gr., total solids, ash, iron, sulphuric anhydride, keeping-properties in ink-wells, action on steel pens, streak-tests, penetration and fluidity, and resistance to sunlight and reagents. Then follows the method of rating. It is the only official book of its kind, and useful as supplying standards for unusual products.]

White, F. *Bookkeeping for Dentists.* 6½×4½. Pp. 60. 1s. 6d. net. (Baillière, Tindall & Cox, 8 Henrietta Street,

London, W.C.) [A system of bookkeeping especially adapted for dentists. Begins with an explanation of the technicalities of bookkeeping, and then follows a list of abbreviations for use by dentists, specimen-pages of the various books of account, and method of drawing up a balance-sheet. A useful little book, supplying to dentists information on a subject which is not part of the curriculum.]

Wingfield, H. E. *An Introduction to the Study of Hypnotism: Experimental and Therapeutic.* 7½×5. Pp. 184. 5s. net. (Baillière.)

Woodward, C. J. *A B C Five-figure Logarithms and Tables for Chemists.* 12mo. Pp. 72. 2s. 6d. net. (Simpkin.)

Young, D. H. *First Aid to the Sick: or, Diseases, their Description and Treatment.* 7½×4½. Pp. 288. 3s. 6d. (Routledge.)

Boot-dressings.

THE frequency with which we are asked to furnish formulæ for boot-creams, and dressings for leather induces us to translate and adapt the following recipes from Buchheister's "Vorschriftenbuch für Drogisten," a new edition of which has just been published by Springer, Berlin. Although we have published during the past ten years numerous recipes for these products, and many others appear in "Pharmaceutical Formulas," it will be found that the following formulæ exhibit points of difference which will be useful to those pharmacists who desire to adopt or work out a recipe for a boot-dressing:

—	1	2	3	4	5	6	7	8	9	10	11
Carnauba wax ...	10	7	—	—	5	350	—	4	—	5	4
Yellow wax ...	—	—	18	15	10	—	30	—	10	—	—
Ceresin ...	24	9	—	—	30	100	—	40	50	35	36
Japan wax ...	—	—	—	—	5	78	—	—	50	—	10
Paraffin wax ...	—	3	—	—	—	—	—	—	—	—	—
Black Montan wax ...	—	—	—	—	—	—	—	4	—	—	—
Resin ...	16	1	—	—	—	100	—	—	—	—	—
Hard soap ...	—	—	2	5	—	—	12	—	—	—	—
Wool fat ...	—	—	—	—	—	—	—	2	—	—	5
Venice turpentine...	—	—	—	—	—	50	—	—	—	—	—
Turpentine oil ...	—	—	40	40	160	£50	100	120	180	130	50
Turpentine substitute	150	—	—	—	—	—	—	—	—	—	—
Resin oil ...	—	60	—	—	—	—	—	—	—	—	—
Pine oil ...	—	—	—	—	—	150	—	40	—	—	100
Water ...	—	—	40	40	—	—	100	—	—	—	—
Glycerin ...	—	—	—	—	—	100	—	—	—	—	—
Spirit ...	—	—	—	—	—	—	7.5	—	—	—	—
Nigrosin, oil-soluble	—	—	—	—	—	—	—	3	1	3	2
Lampblack, finest ...	—	—	—	—	—	—	—	2	—	2	3
Nankin brown ...	—	—	—	—	—	—	1.5	—	—	—	—

Where no colouring-matter is indicated, use an oil-soluble aniline dye with or without lampblack, according to the colour required. The proportions of the dyes can be judged by those given in the last five formulæ.

The following formulæ illustrate the emulsified variety of boot-creams:

12.	Cream of tartar ...	5
Potash ...	Turpentine ...	25
Borax ...		
Water ...	14.	
Dissolve and add—		
Carnauba wax ...	Paraffin wax ...	20
Resin ...	Wool fat ...	10
Ceresin ...	Soda lye (38° B.) ...	5
Boil till a homogeneous cream results.	Boil together 20 minutes and add—	
13.	Carnauba wax (cut small)...	20
Crystal soda ...	Nigrosine (fat soluble) ...	4
Water ...	After standing incorporate	
Dissolve and add—	Hot water ...	150
Marseilles soap ...	And when the mass is uniform, add gradually the following mixture:	
Boil and add—	Nigrosin (water-soluble) ...	4
Resin ...	Formalin ...	1
Yellow wax ...	Hot water ...	100
Carnauba wax...		
Continue the heat until the mixture is uniform, then add—		

The white variety of boot-dressing is made as follows:

15.	Then incorporate the following mixture:	
White ceresin ...	Zinc white ...	10
Refined carnauba wax ...	Ultramarine ...	a trace
Melt and add—	Turpentine ...	20
Turpentine oil ...		

Trade Report and Market Review.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are obtained for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at these prices.

42 Cannon Street, London, E.C., August 25.

THE drug and chemical markets have a comparatively quiet appearance, with a limited business in progress. Price alterations, which are few, include a further not unexpected advance in cream of tartar and tartaric acid. Citric acid, on the other hand, is cheaper. Acetic acid is firm at the advance established a fortnight ago, practically all the makers quoting alike. Cascara sagrada is in rather more demand. New chamomiles have advanced, and offers are difficult to procure. New juniper-berries show a very fair crop at reasonable prices. Otto of rose is still the subject of much difference of opinion as regards the future, although the Bulgarian market in certain quarters shows a rising tendency. Opium and morphine buyers hold off, while Smyrna is endeavouring to advance prices further. Menthol is firm but quiet. Castor oil is firmer. Quinine is flat with an easy undertone. Both coriander and linseed are dearer. Vanilla at auction met with good competition at firm rates. Shellac is dull and unaltered, and turpentine steady. The following table shows the principal changes of the week:

Higher	Firmer	Easier	Lower
Asafetida	Cascara sagrada	Aloes (Cape)	Citric acid
Benzoin (Siam)	Buchu	Honey (Jamaica)	Ipecacuanha
Cardamoms	Castor oil	Squill	Quicksilver (seconds)
Chamomiles	Copper sulphate		
Coriander-seed	Sarsaparilla		
Cream of tartar	(grey Jam.)		
Linseed	Tartaric acid		
Palm oil			

Cablegram.

SMYRNA, August 25.—The sales amount to 120 cases opium to the United States, Europe, and spectators at from 10s. 3d. to 11s. 3d. per lb., indicating a firm market, and an advance is expected.

NEW YORK, August 25.—Business in drugs is fair. Opium remains easy at \$5.25 per lb. for druggists by single cases. Peppermint oil is 5c. per lb. higher at \$2.05. Hydrastis (golden seal) is firm at \$2.15. Jalap is quiet at 38c. Copaiba balsam is steady at 38c. for Central and South American. Spearmint oil is strong at \$2.25. Cascara sagrada is unchanged; and Curaçao aloes is steady at 8c. per lb.

Heavy Chemicals.

The improvement in demand lately experienced at all the main centres of the heavy-chemical industry has been well maintained. Orders for early delivery both on new and contract account have been good, and there has been a heavier inquiry for forward. Exports are a good average for the season, particularly caustic soda, saltcake, and other products of the alkali branch. Values are well maintained.

SULPHATE OF AMMONIA.—This market remains very firm, and there are some further advances to report on last figures, though they are comparatively slight. Prompt parcels are well taken up, and fair business has been done on forward account. Present nearest figures are: Beckton prompt, 25 per cent. ammonia guaranteed, 11l. 15s. to 11l. 16s. 3d., net cash, usual terms; London, 24½ per cent., 11l. 8s. 9d. to 11l. 10s. net cash; Leith, 12l. 5s. to 12l. 7s. 6d.; Hull, 12l. to 12l. 1s. 3d.; and Liverpool, 12l. to 12l. 2s. 6d.

ALUMINA PRODUCTS remain a steady market, and the demand is a good average. Crystal alum, lump, 5l. 5s. to 5l. 12s. 6d.; lump in tierces, 5l. 10s. to 5l. 17s. 6d.; and ground, in bags, 5l. 15s. to 6l. 2s. 6d. per ton, free on rails Lancashire or Yorkshire, or f.o.b. Hull, Goole, or Liverpool. Sulphate of alumina, purest qualities, practically free of iron, ordinary strength, 4l. 12s. 6d. to 5l. 2s. 6d. per ton in casks, with customary extras for similar pure quality in higher concentrations, and usual allowances for bags and loose slabs. Aluminous cake, 50s. to 57s. 6d.; and aluminous ferric, 50s. to 57s. 6d., according to quality, quantity, and destination. Hydrate of alumina, purest quality and high strength Al₂O₃, 12l. 10s. to 13l. 10s. per ton in large casks, free on rails. Special pulp hydrate of alumina, 15s. to 17s. 6d. per cwt., c.i.f.; special pulp quality, dried and in lumps, 35s. to 37s. 6d. per cwt. c.i.f.; and ground, 37s. 6d. to 40s. per cwt. Aluminate of soda, purest quality and high strength Al₂O₃, 27s. 6d. to 30s. per cwt. Carbonate of alumina, 32s. 6d. to 35s. per cwt.

Manchester Chemical-market.

August 23.

There is a steady demand for heavy chemicals, but on home account it is less active than a week ago. Bleaching-powder and caustic soda have been in rather slow inquiry on export account, but saltcake and soda-crystals have ruled firm. White powdered arsenic is in poor demand, and best Cornish makes hardly realise last week's prices. Carbonate of potash is in fair request, 90 to 92 per cent. being quoted 19l. to 19l. 5s. per ton. Sal ammoniac, quiet. Epsom salts is quoted 60s. per ton in bags, and 65s. to 80s. per ton in export casks and barrels. Glauber salts, 42s. 6d. per ton, Manchester. There is a good demand for citric and tartaric acids. Rectified sulphuric acid, in fair inquiry at 4l. per ton for 167° to 170° T. on rails at works. Sulphate of copper still rules in sellers' favour at 19l. per ton, best brands, delivered Manchester, but rather smaller business is being put through. Coal-tar products are quietly steady. Sulphate of ammonia is 11l. 17s. 6d. to 11l. 18s. 9d. per ton on rails Manchester. Creosote, lower, at 2½d. per gal.

American Drug-market.

New York, August 16.

The past month has witnessed little improvement in the general quiet conditions which have characterised the New York drug-market since early summer. In the absence of speculative demand price-changes have been moderate, and only along the lines expected from the influence of new season's supplies. Peppermint oil and hydrastis are tending higher.

ALOES.—Owing to the tardy arrival of new crop and the development of considerable demand, prices are firmer, 8c. being reported paid for a ton lot where 7½c. was previously acceptable. Gourds are very scarce, and 10½c. is asked. Owing to the higher cost of raw material, alcin is firm at 70c. to 80c., with higher prices in prospect.

BUCHU is quiet but very firm at the recent advance to \$1.50. In view of the scarcity at primary sources, holders of the limited stock restrict sales to regular customers at the above figure.

CANADA BALSAM is fairly steady at \$4.50 to \$4.60 for barrels and cans respectively. Supplies are reported short in gathering districts, but demand is backward. Oregon ranges from \$1 to \$1.10 as to quantity and source of product.

CASCARA SAGRADA is unchanged on spot, with prices at 7½c. to 8½c., as to age and quantity. There is little information from the coast regarding the progress of this year's peeling, but a shortage is expected, and prices are accordingly firm at 6c. f.o.b. coast.

COPAIBA.—Arrivals from primary sources have fallen off somewhat, and with a fairly good spot demand C. and S. American grades are the turn firmer at 35c. to 40c. Para is comparatively quiet at 45c.

GUARANA is lower at \$2.25 for U.S.P. drug, owing to more plentiful supplies and absence of important demand.

HYDRASTIS.—According to recent reports from the gathering districts, only small quantities have been dug so far, and prospects are none too bright for a satisfactory output.

Spot supplies are low, and from \$2.15 to \$2.25 is asked for moderate parcels.

JALAP is following a routine course, with prices steady at 37c. The larger consumers are chary of operating in a large way meantime owing to lack of convincing reports regarding primary conditions. It is firmly believed in some quarters that a considerable portion of the late crop has been carefully stowed away for the purpose of keeping the secondary markets tight and amenable to a high level of prices.

PEPPERMINT OIL (AMERICAN) has been a subject of increasing interest during the past few days, firmer quotations from primary sources having resulted in a 10c. advance in spot quotations to \$1.90 for tins. The distillation of new oil has been delayed somewhat in all sections, but the weather has been favourable, and so far indications point to a crop equal in volume to that of last year. In addition, there is estimated to be about 50,000 lb. of oil held over from previous years. Only a small proportion of this is available on spot, however, local dealers, ever since the flurry of last year, having pursued a hand-to-mouth policy, vainly expecting that the burden of stock at primary sources would induce easier terms. In the absence, therefore, of important stocks in secondary markets and a working agreement among themselves, country dealers are apparently more securely entrenched than before, and it may be assumed that a higher basis of prices will be established.

SPERMINT OIL is also tending higher under similar influence of scarcity on spot and firmness in country markets, although a good crop is expected. In the local market prices have been advanced from \$2.25 to \$2.30, with offerings limited.

Mitcham Essential-oil Crops.

Messrs. W. H. Hobbs & Co., Ltd., write that the distillation of peppermint has commenced, and the yield has so far varied between 6 and 6½ lb. per still. The crop should be an average one, provided weather continues favourable during the period of harvest, which will continue over the next six weeks. The acreage under cultivation is not large, and as very little old oil remains in growers' hands prices should at least be maintained for oil of finest genuine quality. As regards lavender, the prices obtainable for oil of late years have been quite unremunerative, and in place of distilling a large part of the blooms have again been bunched. The finest lavender-water cannot be produced without English oil, and the falling-off in the demand is to be regretted, as no sweeter or more truly refreshing perfume is obtainable. We should not be surprised to see popular taste again reassert itself in a demand for English lavender products. The demand for chamomile oil has been small, and cultivation of late years is quite unimportant.

Saccharin.

In our issue of June 11 (p. 370) the announcement was made that Messrs. Sadler & Co., Ltd., manufacturing chemists, Middlesbrough, had completed experiments in the manufacture of saccharin, and were laying down extensive plant for its production. This fact was also intimated to the members of the National Union of Mineral-waters Manufacturers' Associations, Ltd., by circular, in which it was stated that if Messrs. Sadler & Co., Ltd., received the necessary support they would be prepared to supply the trade with saccharin guaranteed 500 strength at 20s. per lb. duty paid at the present rate. The saccharin was guaranteed to be made by processes the patents for which have expired, and it was stipulated that a certain quantity for delivery over a period not exceeding two years should be ordered. While this proposition was being considered, another circular was issued by the National Union in July, stating that they had been unable to complete the arrangements, and that they had entered into a conditional agreement with the Saccharin Corporation by which the mineral-water manufacturers of this country will be able to obtain the 550-strength saccharin at 20s. 6d. per lb. net, duty paid, all contracts to be made through the Secretary of the National Union, and for the quantity each individual user is likely to require up to December 31, 1912. The Saccharin Corporation inform us that the matter has not yet been carried through, but that there is every possibility that it will be.

London Markets.

ACID, ACETIC.—Practically all the makers have now been asking the advance of 20s. to 30s. per ton notified in our issue of August 6.

ACID, CITRIC, is from ¼d. to ½d. per lb. cheaper, English makers having reduced their prices to 1s. 3½d. to 1s. 4d. per lb.

ACID, TARTARIC.—Both English and foreign are fractionally dearer, the former now being quoted at 10½d. per lb.

and the latter at from 9¾d. to 9½d. Should the demand be sustained, it is quite anticipated that a 10d. market will be seen for foreign.

AGAR-AGAR.—Business has been done at 1s. 10d. per lb. spot for No. 1 Kobe strip. The present high prices are regarded as probable to the end of the year.

ANISEED is unchanged at 23s. 6d. to 25s. 6d. per cwt. for common to good Russian, and 35s. for Spanish.

ARROWROOT.—At auction 30 half-barrels Bermuda were bought in at 2s. per lb.

CALUMBA.—The *Caledonia*, from Bombay, has brought 150 bags to a bare market. Small sales of good washed sorts are reported from second-hands at 47s. 6d.

CANARY-SEED is steady but slow of sale at 41s. per quarter for Turkish and ordinary Morocco, and 47s. to 52s. 6d. for good to fine Morocco. Spanish is quoted 56s. to 62s. 6d. for fair to good, and 67s. 6d. to 75s. for fine to extra bold.

CARAWAY-SEED is quoted 26s. to 27s. per cwt. on the spot for ordinary to good new crop Dutch.

CASCARA SAGRADA.—Privately business has been down at 34s. per cwt. spot. The position in New York is regarded as firm, as stocks both there and on the Pacific Coast are small. There is, however, no anxiety to get prices on a higher level, as such would encourage the peelers. In the drug-auction 70 bags catalogued were sold previous to the sale and 3 bags of loose collected were sold at 36s. per cwt.

CHAMOMILES.—At the moment dealers here state they are unable to offer new Belgian, their principals having mostly withdrawn owing to the uncertain weather and crop. Some business was done early in the week in first pickings at about 74s. ex wharf, but they cannot be replaced at this figure, and it is doubtful if 80s. would be accepted by Belgian shippers.

COPPER SULPHATE is firmer at 18l. 15s. per ton for ordinary Liverpool brands for prompt delivery and 19l. 5s. for November-April delivery.

CORIANDER-SEED is considerably dearer, sound old crop Morocco having been sold at 14s. per cwt, but 14s. 6d. is now asked. Wormy has been sold at 12s., and the quotation is now raised to 12s. 6d. per cwt. There appears to be very little new crop in Morocco, and what there is has been much damaged by rain. For this quality 14s. is required.

CREAM OF TARTAR is firmer at from 79s. to 80s. per cwt. for 98 per cent. powder, and 77s. to 78s. for 95 per cent.

CUMIN-SEED.—Both Morocco and Malta are in short supply, and higher prices may be expected, but as demand is at present slow quotations are unchanged at 33s. to 35s. per cwt. for ordinary to fair, and 37s. 6d. for good sifted Morocco, while Malta is offering at 38s. for old and 40s. for new.

DILL-SEED is offering at 12s. per cwt. on the spot.

FENUGREEK-SEED is steady at 10s. 6d. to 11s. per cwt. for bright old crop Morocco on the spot, and 8s. 6d. to 9s. for this season's, which is mixed with discoloured grains owing to rain.

JUNIPER BERRIES.—The new Italian crop has been of fair dimensions and has opened at reasonable prices, ranging from 10s. 9d. to 13s. 6d. per cwt. c.i.f., the higher price being for fine sifted quality. Some quantity has been sold for export in primary markets, and the first shipments to London may be expected by the end of September.

LINSEED is again dearer; new crop Dutch is offering at 73s. to 75s. per quarter, landed terms, and fair to good Morocco at 70s. to 72s. For uncleaned River Plate 65s. is required.

MENTHOL remains firm but quiet, with small sales of Kobayashi at 9s. 5d. per lb. spot. In the drug-auction 3 cases Kobayashi crystals were held at 9s. 8d. per lb.

MILK-SUGAR.—Demand is mostly for small lots, and is readily satisfied at 43s. per cwt.

MORPHINE.—The situation is more or less perplexing, opinions differing as to the future market course. There is practically no contract business being done, and makers not having bought full supplies of raw material are in-

different sellers in the present unsettled position. Hydrochloride powder is obtainable at 6s. 3d. per oz., and slightly less in quantity.

OIL, CASTOR, is firmer, Hull make of first pressing offering at 31l. per ton, in barrels, for prompt delivery, and 31l. 5s. for September-December, delivered free on wharf London. Belgian firsts is 30l. 10s. for prompt ex wharf London. In Liverpool 3½d. to 3⅝d. per lb. is quoted for good seconds Calcutta spot.

OIL, COD-LIVER.—Agents maintain last week's advanced quotations, which are from 103s. to 105s. per barrel c.i.f. for finest brands, although in one direction an offer of slightly less would be submitted for a round lot. Writing from Bergen on August 22 our correspondent reports that the firmer tendency continues, and to-day's quotation for finest non-congealing Lofoten oil is from 101s. to 103s. per barrel c.i.f. terms. The exports from Bergen up to date amount to 5,830 barrels, against 8,720 barrels at the corresponding date of last year.

OIL, PEPPERMINT.—American Wayne County in tins remains quiet, but we do not hear that last week's advanced rates have been paid. Good brands offer at 8s. 3d. to 8s. 4½d. on the spot, and there are still sellers of H.G.H. at 10s. 9d. London terms. Japanese is quoted 5s. 9d. on spot for Kobayashi. In auction 4 cases of Hale & Parshall's were limited at 9s. 9d. per lb., London terms.

OIL, TURPENTINE, has been steady at from 50s. 3d. to 50s. 6d. per cwt. for American on spot.

OPIMUM.—The situation remains practically the same as last week, except that Smyrna is endeavouring to bring about a rise of 4d., which does not seem to impress buyers here, they remaining indifferent, believing, in view of the large crop, that prices have not touched their lowest. From Smyrna 10s. 9d. per lb. c.i.f. is cabled as the lowest for 11 per cent. gum, but there are no buyers above 10s. 6d. Good Turkey druggists' is worth 11s. 6d. to 12s. spot.

A Smyrna letter dated August 12 states that the sales of the week amounted to 56 cases, opening at 100 piastres for good Karahissar, and closing at 105 piastres, or 11s. 8d., per lb. c.i.f. The advance was precipitated by native speculators, who endeavoured to cover sales made in blank some two months ago. A few sales for export were made at the same price. Should buyers hold off for a few days, a decline may be expected, as the advance on this occasion was forced. The arrivals amount to 2,098 cases, against 918 cases at the same time of last year. Writing on August 13, a second Smyrna correspondent states that the transactions of native speculators having led to a successive advance, consumers have been obliged to follow the movement for the execution of orders received, and in view of the number of buyers present (four buyers and ten speculators), it is a matter for congratulation that the advance did not become more marked. The sales amount to 56 cases, comprising 49 cases "extra" Karahissar t.q. at the equivalent of from 11s. 1d. to 11s. 8d., six cases Yerli at 12s., and one case prime Karahissar t.q. at 11s. 3d. per lb. c.i.f. European ports, of which 34 cases were for local speculators. The situation is now more uncertain, depending entirely on the demand. Should this be active, prices will advance or be maintained, and should consumers hold off, prices will probably decline. Writing on August 12, a third Smyrna correspondent reports an advance of 9d. per lb., brought about principally by speculative buyers, and to the fact that several merchants, having sold on forward delivery last month, were obliged to secure material to fulfil engagements. Some 56 cases have changed hands on speculation, and 14 for consumers. The question now is whether exporters and speculators will continue paying to-day's figures. If they do, and an active demand follows, we may not only have a maintenance of the present position, but may also see the market run up another 1s. If no buyers come forward for a week or ten days, we may see our market drop 8d. to 9d. per lb.

OTTO OF ROSE.—Inquiries among leading agents for Bulgarian houses point to the fact that so far little new contract business has been done, buying having been from hand to mouth. On the other hand, the bulk of reports received in London still denote a rising tendency in Bulgaria, and, in one instance, an agent has been instructed to advance his price by 3s. per oz., while others maintain their previous rates, which now vary from 27s. to 32s. 6d. per English oz., according to brand.

Our Bulgarian correspondent, in the course of a letter dated August 12, confirming previous statements as to crop and prices, says: Up to this moment the total purchases of good

and bad otto by all the exporters, dealers, and jobbers amount to a little over 80,000 oz., and there still remains for sale in many of the rose-villages more than 60,000 oz. The output of every rose-village, when bought, turns out 10 to 20 per cent. in excess of the most liberal estimate.

We have received several communications in regard to our correspondent's reports, and subjoin a few extracts:

Mr. W. Naumann says: "Your correspondent states that 'even now, after a drop of 2s., the prices of 25s. to 27s. per oz. have been paid.' These are equivalent to about 28s. 6d. to 30s. 6d. per Turkish oz., which is the price at which some exporters are disposing of their old stocks, either, of course, adulterated oil or else doing their customers a good turn by giving them their old cheaper stocks at the present cost price. If, therefore, even these prices are obtainable by the peasants, there is undoubtedly good reason for it. . . . In view of recent statements by good authorities that the average percentage of adulteration is 33 to 50 per cent., the new crop would appear to be about 100,000 oz., which is a very poor crop. Mr. Naumann's principal stated a few weeks ago that only about 60,000 oz. remained in the market unsold, and he estimated the crop at about 120,000 T. oz.—far from a good crop."

Messrs. Chas. Zimmermann & Co., writing on August 19 in regard to our correspondent's quotations, say that their principals quote 30s. 6d. per T. oz. for finest virgin otto, equivalent to 27s. per English oz. They ask if our Bulgarian correspondent would kindly state whether he considers that this price is likely to come down. Messrs. Zimmermann's principals have, since the above was written, advanced their price by 3s. per T. oz.

Messrs. P. Samuelson & Co. in a circular letter stated that "high figures have certainly been paid by some shippers who were in a hurry to cover sales already made when the prospect of the crop was very bright, and who are now doing their utmost to keep consumers off the market and so depress prices in the producing villages for their own purpose; it is to be noted, however, that these shippers will not make any definite offers of otto." They quote 27s. per English oz. for their principal's otto.

Messrs. Fredk. Boehm's principal states that "If the interests of some exporters oblige them to write to their clients that the crop is a good one, I think the time is not far distant when it will be proved otherwise, and a lesson will have been taught to consumers who have delayed their purchases." He believes that the London market will eventually be starved of pure otto.

QUICKSILVER.—While first-hand remains unchanged at 8l. 12s. 6d. per bottle, second-hand is again easier at 8l. 4s. 6d. The arrivals this week include 22,500 lb. from Austria-Hungary and 12,600 lb. from Mexico.

QUININE.—What interest there is, is centred in the Amsterdam bark sale to-day (Thursday), where the largest quantity on record is to be offered—viz., 69,920 kilos. of quinine "in the bark." Meanwhile the consumptive demand is quiet, the usual German brands of sulphate offering at from 6½d. to 6¾d. per oz., Amsterdam 6½d., and Java 6¾d. to 6½d., according to quantity.

VANILLA.—At auction on Wednesday 200 tins were offered and sold with competition at firm prices. *Seychelles*.—6½ to 7 in. at 13s.; split and foxy, 9s. to 11s. *Madagascar*.—7½ in. at 14s. 6d.; 7 in. at 13s. to 13s. 6d.; 6½ to 7 in. at 13s.; 6½ in. at 12s. 6d. to 13s.; 6 to 6½ in. at 12s. 6d.; 6 in. at 12s. to 12s. 6d.; 5½ in. at 11s. 6d. to 12s.; 5 in. at 11s. to 11s. 6d.; 4½ in. at 10s. 6d.; 4 to 4½ in. at 10s. 6d.; 4 in. at 10s. 6d.; 3½ to 4 in. at 10s. 6d. *Mauritius*.—Split and foxy 11s. 6d.; seconds and thirds 11s.

WAX, VEGETABLE.—Japan is quiet, with good quality offering at 42s. 6d. per cwt. on spot.

London Drug-auctions.

At the auctions of new and old drugs a decidedly dull tone prevailed, and the bulk of the offerings was bought in, there being few features. Cape aloes sold at rather easier rates, but the quality was mostly common and soft. Asafetida of good quality again realised extreme prices. Round bichu-leaves sold at an advance of about 7d. on the previous sale. Sumatra benzoin is steady, and for Siam higher rates were paid, this description being scarce. Cardamoms met with good competition at an advance of about 2d. per lb., while seed was steady. Ceylon coca-leaves partly sold at full rates. Cascara sagrada is tending firmer. Dragon's-blood is quiet. Gamboge is slow, and Jamaica honey again tended easier. Matto Grosso ipecacuanha met with a decline of about 1s. on the previous sale rates, this fact probably being influenced by arrivals. Rhubarb is quiet. Jamaica sarsaparilla brought

rather firmer rates, but native remains neglected. New Tinnevely senna-leaves brought a slight advance, and bees' wax was mostly unaltered, Jamaica being held for higher prices, to which buyers did not respond. Pressure on our space prevents the publication of our usual table.

ALOES.—Cape was the only description sold, practically 50 cases finding buyers at rather easier prices, the bulk of the offerings being common and soft. On 20 per cent. tares, Mossel Bay sold at 32s. for fair bright firsts, slightly soft, 30s. to 30s. 6d. for fair seconds, part slightly drossy and dull, and 27s. 6d. to 29s. 6d. for common dull and soft to ordinary seconds. Algoa Bay, on estimated tares, sold at 30s. for fair seconds and 28s. for fair broken and part livery. Socotrine in kegs were held at 80s. for stiff paste; and 14 cases Zanzibar in skins were bought in.

The exports from Cape Colony during June amounted to 75,599 lb., valued at 711l., against 78,040 lb., valued at 777l., during June 1909. For the six months ending June the exports were 449,756 lb. (4,453l.), against 374,322 lb. (3,359l.) during the corresponding period of 1909.

ASAFOETIDA.—A new arrival of 93 packages and eleven cases of last year's import were offered. Only nine boxes and three cases were competed for, and these sold at very high prices. For three boxes brownish free almonds 23l. 15s. was paid, for four boxes rather soft brownish almondy block 20l. 10s. to 21l. 5s. was paid, and two boxes similar, but stony, realised 16l. 5s. per cwt. Three cases good blocky and loose almonds realised 21l. to 21l. 10s. per cwt.

BENZOIN.—Of genuine Siam eleven cases were offered, and, being extremely scarce, much higher rates were paid. For one case of pea and bean size, loose, 16l. 15s. was paid. Small blocky grains (one case) sold at 14l. 15s., seed in shivery block (three cases) at 11l. 15s., and dark garblings (one box) at 7l. A single case of small to bold blocky almonds sold at 19l. subject, and a box of blocky grains at 9l. 15s. subject. From another catalogue a single box of small grains in block realised 10l. 2s. 6d. A bid of 16l. 10s. is to be submitted for a case of pea and bean size, and one of 20l. per cwt. for two cases of small to bold free almonds. Sumatra was quiet, only eight packages being disposed of in the sale at from 7l. to 7l. 5s. per cwt. for fair almondy seconds with slightly false-packed ends.

BUCHU.—A fair quantity was offered, but only six bales consisted of round leaf, which were limited at 7s., bids of 6s. 8d. being refused, and one bale was subsequently sold at 7s. For longs, 2s. was paid for dullish, and fair green limited at 2s. 3d. to 2s. 6d. Fair green ovals sold at 2s. 2d. Ten packages of spurious long (*Empleurum serrulatum*) failed to elicit bids. Privately a small sale was made previous to the auction at 7s. 3d. for round.

The exports from Cape Colony during June amounted to 8,956 lb., valued at 1,002l., against 3,778 lb., valued at 138l., during June 1909; for the six months (January to June) the exports were: 1910, 186,801 lb., valued at 15,623l., and 1909, 217,710 lb., valued at 7,810l., being 30,969 lb. less.

CARDAMOMS met with good competition, prices for Ceylon-Mysore showing an advance of 2d. per lb.; seed being unaltered. The following rates were paid: Ceylon-Mysore, bold silky palish to pale, 2s. 7d. to 2s. 9d.; good bold palish to pale, 2s. 4d. to 2s. 5d.; bold and medium palish to pale, 2s. 1d. to 2s. 3d.; medium palish to pale, 1s. 9d. to 2s.; small and medium palish to pale, 1s. 6d. to 1s. 8d.; bold splits, 1s. 8d.; pickings, ordinary to fair brown and split, 1s. 3d. to 1s. 5d.; seed, 1s. 7d. to 1s. 10d. for pale to good dark; Ceylon-Malabar, medium and bold brown (1 case), 1s. 3d.

COCA-LEAVES sold at firm rates; 33 cases good greenish Ceylon-Huanuco were offered, of which 5 sold at 1s. 9d. per lb. Buyers, however, would not give more than 1s. 7d., and the balance was bought in at 1s. 9d. Another lot of 15 cases Ceylon-Truxillo was offered, and sold at from 6d. to 7½d. for ordinary broken.

DRAGON'S BLOOD.—Quiet. The only sale consisted of two cases damp bag-shaped lump at 6l. per cwt.

ERGOT.—Two bags of wormy Russian sold without reserve at 1s. 2d. per lb. net, and three bags wormy Spanish sold without reserve at 1s. 5d. per lb. For three bags of sound grey Russian 1s. 6d. per lb. was wanted. Privately Russian of sound quality is obtainable at 1s. 5½d. net on spot.

FENNEL-SEED.—Privately business has been done at 23s. 6d. per cwt. spot.

GUM ARABIC.—In auction 15 cases of ordinary East Indian sold at 18s. per cwt. subject.

HONEY.—Flat and easier. Pale set Jamaica in barrels sold at 31s. 6d., palish brown set at 27s. to 28s.; dark to darkish brown liquid 24s. to 24s. 6d., and a parcel of 75 cases from Honolulu sold without reserve, including 31s. for fair pale set, 26s. to 27s. for ordinary setting, and from 16s. 6d. to 18s. for dark brown fermenting and sugary. A parcel of 30 cases of Hayti also sold at 28s. for clear bright amber liquid, 25s. to 26s. for fair liquid amber, 23s. 6d. for darkish liquid, and 21s. for very dark liquid, all per cwt., subject to sellers' confirmation; for white set Hayti, in casks, 31s. was paid from another catalogue.

PECACUANHA.—Matto Grosso sold at a decline of about 1s. per lb. as compared with previous sale rates, from 7s. to 7s. 4d. per lb. being paid for three bales of ordinary dull lean to fair bright. Seven bales sea-damaged sold at from 5s. 10d. to 6s. 3d. for slightly damaged, and at from 3s. 5d. to 4s. 4d. for badly damaged. Minas was bought in at 7s. 6d., the broker intimating he would "take less." Five bales Cartagena were bought in at 6s. Twenty-five packages Matto Grosso have arrived.

KOLA.—Seven bags of fair West Indian sold at 3d. per lb.

MYRRH.—For 2 cases good picked Aden 5l. 5s. had been bid privately and refused. Nine barrels of bold pea-size from Aden (imported in 1907) were sold at 48s. per cwt., subject to seller's confirmation.

OIL, LEMONGRASS.—A single case, containing 52 per cent. analysis, sold without reserve at 1½d. per oz.

OIL, LIME.—Steady. Four cases of West Indian distilled sold at 1s. 6d. per lb.

ORANGE-PEEL sold cheaply, three cases rather dark strip realising 4d. per lb. without reserve.

ORRIS.—Five casks common wormy Florentine sold without reserve at 15s. per cwt.

RAUWARB.—Quiet. The only sale was that of 2 cases bold round horny High-dried, with three-quarter very fair pinky fracture, at 6½d. per lb. Several cases have been sold privately, including small round and trimming Canton root, which is offered at 1s. per lb. Small round and druggists' trimming Shensi is worth about 2s.

SARSAPARILLA.—Grey Jamaica was slightly firmer, 14 bales being offered and sold at from 1s. 3d. to 1s. 4d. for fair to good; 2 bales of reddish mixed of nondescript character sold at 11d. Native-Jamaica still remains slow of sale, 2 bales only finding buyers at from 10d. to 11d. for fair red. Of Lima-Jamaica 21 bales were offered and six sold at 10d. per lb. for roughish. Eight bales of Guatemala and Mexican mixed were bought in at 8d.; a bid of 7d. is to be submitted.

SENNA.—Forty-nine packages Alexandrian offered, but only 13 bales pods sold at 5d. to 5½d. per lb. Leaf of poor colour held for 3½d., and common broken 2½d. per lb. Of Tinnevely, 313 bales offered and sold at rather dearer prices. For good boldish medium leaves 3d. to 3½d. per lb. was paid, while small to medium realised 2d. to 2½d. per lb., and a few lots of small spotty went for 1½d. to 1¾d. per lb. Pods sold at 2¾d. to 3d. per lb. for dark to fair.

SOY.—Two casks Chinese sold at 1s. 2d. per gal., duty paid for Yan-loong.

SQUILL.—Ten bags of ordinary dampish sold, without reserve, at ¾d. per lb., being cheap.

WAX, BEES'.—The chief sale consisted of 74 packages Abyssinian, which realised 6l. 12s. 6d. per cwt. for fair block; another lot of 775 packages was bought in at 7l.; 49 packages East African sold at 6l. 10s. for fair block, part dark; and 50 packages Madagascar sold at 7l. for fair yellow block, and at from 6l. 7s. 6d. to 6l. 10s. for fair, part dark; three packages Mombasa realised 6l. 15s. to 6l. 17s. 6d. Jamaica was firm, holders asking 8l. per cwt., but no sales were effected.



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they are not recorded.

Queries by subscribers on dispensing, legal, and miscellaneous subjects pertaining to pharmacy and its allied trades are replied to in these columns, if they are of general interest.

Letters submitted to the Editor for publication (if suitable) should be written on one side of the paper only. Their publication in the 'C. & D.' does not imply our agreement with the opinions of the writers.

"Guaranteed" Otto of Rose.

SIR,—A number of dealers in otto of rose offer this oil guaranteed to pass Parry's analysis. I may point out, however, that it is only an examination of actual deliveries that constitutes an effective guarantee. It is necessary again to draw attention to this, as, although honest firms in Bulgaria take steps to see that the otto is examined before it is packed, there are some irresponsible and unscrupulous exporters there, some of whose names I have never heard until the fact that they are using my name is brought before me, who will guarantee anything to secure orders.

Yours faithfully,

ERNEST J. PARRY.

56A Great Dover Street, S.E., August 18.

Early Use of Cocaine.

SIR,—Dr. Forshaw's remarks on above are interesting reading, but before May 1884, if my memory serves me, cocaine dissolved in ol. caryoph. was tried as an application to the gums before tooth-extraction at the National Dental Hospital, Great Portland Street, London, W. I gave the cocaine, for the first few trials. It was not at that time injected, and therefore we were not enthusiastic.

Yours truly,

A. STOOKE.

Gillingham.

[Practical knowledge of the use of cocaine as a local anæsthetic dates from September 1884. In the *C. & D.*, November 1884, we reported that Messrs. Allen & Hanburys had issued a circular regarding the alkaloid, whose "success [in causing anæsthesia of the eye] was demonstrated at the recent Ophthalmic Congress at Heidelberg" (September). In the previous month (see *C. & D.*, December 1884, p. 621) Dr. Freud, of Vienna, published a research on the alkaloid, which stated that it had caused local anæsthesia of the tongue, a fact which had already in 1880 been noted by Dr. von Anrep, a Russian, working in Würzburg. Dr. Karl Koller, of Vienna, noticing Dr. Freud's statement, "argued that cocaine would have a similar effect on the eye. After many experiments on animals, on himself and friends, and afterwards on patients, he published his discovery at the Heidelberg Ophthalmological Congress in September" (*C. & D.*, 1884, p. 621). We then commented upon the various purposes for which it was being employed, including hypodermic injections for minor operations, and the suggestion "for use in dental operations and toothache for deadening the sensibility of the dental pulp." The cocaine and clove-oil preparation was used by Mr. Oakley Cole in December 1884—see *C. & D.*, January 1885, p. 36, where other suggestions for its use in dentistry are given, including a statement by Dr. F. Moore, of New York, to the effect that "cocaine hydrochlorate will become of great benefit in dental operations, and will take the place of laughing-gas." The first definite mention of the need for hypodermic injection which we can trace was by Mr. J. M. Ackland, of Exeter, published in April 1885 (*C. & D.*, 1885, p. 212). We have referred to these old volumes in order to present the facts accurately, as the memory is occasionally treacherous. The data show that Dr. Forshaw was wrong in saying that the glowing description of the success of cocaine was given in April 1884, and it was after September of that year that a mixture of cocaine and clove oil was used. Mr. Stooke is right in saying that dentists were not at that time enthusiastic about cocaine—in fact, Mr. Morton Smale said then that it had proved quite valueless in his hands.—EDITOR *C. & D.*]

Chemists' Combines.

SIR,—If "Combine" will re-read my letter in the *C. & D.*, August 6, he will find that there was no question of chemists cutting one another's prices. My illustration was that of

the Camwal combination stepping in, cutting the retail price themselves, and dealing direct with the customers, leaving the chemist shareholders to live on the profits or dividends from their shares. This Camwal have had to do to meet competition. If this may be done in syphons, why not in other things?

Yours faithfully,

ANTI-COMBINE. (9/37.)

SIR,—Re "Anti-Combine's" letter in the *C. & D.*, August 20. When I have solved the problem of how the nervous lady's son is to learn to swim before he is allowed to bathe, I will give a full reply to "Anti-Combine's" objections to Ucal. If he wishes to emphasise the fact that there is not a legal document of any length that cannot be interpreted in more ways than one, I give him my hearty support. Narrowed down, the broad line of demarcation is this: "Anti-Combine" contends that we can afford to maintain our "splendid isolation," while I unhesitatingly affirm that we cannot; and if I err, I do so in very good company, since many writers have recently shown how the one-shop man is fast disappearing before the onslaughts of the departmental store, etc. Perchance I may be reminded that ours is a semi-professional calling. My reply is, there has long been too much pseudo-professionalism and far too little business, and that is just where the pharmacist has lost ground. What one needs to look for is the motive for any action such as "Anti-Combine" points out in the case of Camwal. This does not exist in Ucal, and it rests with the members to say if it ever shall. Evidently, too, he overlooks the fact that chemists have in recent years made sales for several proprietaries (other than their own) which were not advertised except by window-shows. "Anti-Combine" regards the man who moves from town to town as a negligible factor. I don't; I know otherwise. With the present travelling facilities, the letting of furnished rooms and houses, the paying guest, not to speak of the people who move their bag and baggage from town to town, there is now a large floating population; and what more natural than that they should buy proprietaries which are readily obtainable? Again, "Anti-Combine" fails to realise that several hundred chemists selling the same article are bound to get a greater return per shop than does the one man in his one shop. If he seek to deny this, he practically says that advertisement is of no use, since each one of those hundreds, having exhausted his own possibilities, passes the customer on to a brother chemist in another town.

Yours faithfully,

Bingham, August 20.

CHAS. C. H. CADGE.

[Mr. W. S. Glass, Edinburgh, also writes on this subject.]

Chemists' Hours.

SIR,—As an employer, I was interested in "T. M.'s" letter in the current issue of the *C. & D.* I have on my staff at present an unqualified assistant whose hours are as follows:

Monday ...	8.30—9.45	Thursday ...	8.30—9.45
Tuesday ...	8.30—1.30	Friday ...	8.30—9.0
Wednesday ...	8.30—9.30	Saturday ...	8.30—10.30

An hour off for dinner; forty-five minutes for tea. Sunday duty, two out of five, four hours only. Salary 2*l.* weekly. Does "T. M." think the salary and hours reasonable? Last week "John Bull" replied to a letter from this assistant complaining about "having to work on Sundays in a chemists' shop." "J.B." replied, "What about the sick?"

Yours faithfully,

M.P.S. (10/46).

SIR,—I endorse the letter of "T. M." in the *C. & D.* August 20. I have a splendid employer at the present time, but I was a long time finding him. I was formerly in the employ of a high-class pharmacist. My hours were 8 A.M. till 9.30 P.M. daily, Saturdays 10.30 P.M., Sunday duty every other from 1 P.M. till 2, and again from 6 till 9. Time off, one afternoon from 5 P.M. and one evening from 8 P.M. After being in this situation for over a year I approached the principal for a half-day off. He said he would "think it over." Well, after having thought it over, he told me he came to the conclusion "that I had ample leisure," and that he could not accede to my request. The next morning I gave him a month's notice.

I do not know how pharmacists like this expect assistants to ever become qualified with such hours as I have shown above. Not only are the hours long, but one must "stick at it" all the time. My experience shows me that it is hard to find the manager or principal who will say to his assistant, "You may have a couple of hours' reading now, if you wish." I have, however, found one at last, and I may add that I take twice as much interest in the welfare of my present employer than I have ever done with any other. I serve the customers in a far more ambitious and pushing spirit than when I was tied constantly to the stock counter.

Yours truly,

A TRAVELLED ASSISTANT. (8/50.)

Subscribers' Symposium.

(Information Solicited or Supplied.)

Suggestions Wanted.

F. D. S. (233/68) asks if readers will make suggestions regarding a page for a price-list to be headed "What to do till the doctor comes."

Syrup. Rhamni.

In reference to the formula for this in the *C. & D.*, August 20, may I add that it is a great improvement to use Demerara sugar (genuine) instead of lump sugar, as then the syrup does not crystallise or deposit?—W. Thornton (Blaenavon, Mon.).

Why is this?

I have been puzzled for a long time when making a certain preparation. I use 6 dr. of tragacanth and 55 oz. of fluid, and on straining into a glass jug I can never get more than 48 oz. of product. Why do I lose 7 oz.? Can anyone explain?—J. A. Jeffrey. (258/74.)

Bookkeeping Systems.

In the article on bookkeeping systems signed "W. A. Maben" in the *C. & D.*, August 20, the writer omits the principal advantage of loose-leaf ledgers—viz., that the posting can very soon be done without any reference to the index. A ledger-clerk will, even with an ordinary bound ledger, within a reasonable time almost dispense with the use of the index; but this familiarity with the folios has to be learned again with each new ledger that is opened. In the loose-leaf ledger, where the folio numbers of the accounts are never changed, the clerk's memory soon becomes the index, and thus an enormous saving of time is effected. The ledger is also one of live accounts, as the folios with accounts that have been closed can be removed and a new numbered folio inserted. The posting, too, of a loose-leaf ledger is much more rapid than the card-index system.—W. McIntyre (Bolton).

"The Scandal of the Pharmacy Quack."

Mr. W. Temple Cooper thus paraphrases on behalf of pharmacy, and with apologies, the recent attacks on dental quacks in "M.A.P.," to which reference was made in this journal last week: (1) *What we are doing.*—We are exposing the methods of the incompetent and unscrupulous individual who wilfully misleads people to believe he is a pharmacist and qualified to dispense poisons. (2) *Why we are doing it.*—We are doing this solely in the interests of the public, who, until these articles appeared, imagined that every man undertaking to sell drugs had some special qualifications for doing so. (3) *What we are going to do.*—Our object is, by arousing public indignation in this matter, to bring about the amendment of the existing law, which permits ANYONE to practise pharmacy, however ignorant he may be of the work. The amendment at present suggested will take the form of prohibiting anyone from practising pharmacy unless he holds a licence or certificate granted by the Pharmaceutical Society, under the jurisdiction of the Privy Council.

Dispensing Notes.

Most dispensing problems are dealt with in "The Art of Dispensing," but we are always pleased to get fresh ones for solution, and to receive the opinions of readers on the points discussed.

A Bismuth and Acacia Mixture.

Ireland (12/5) wants to know what colour the following mixture should have. The patient said that when dispensed first the colour was like whisky-and-water. "Ireland" made the mixture several times, the first time using ordinary tap-water, and after standing for a while about one-quarter of the bottle is occupied by a white sediment, which is thrown

down. Eventually he made it with aq. destil., and the mixture was very slightly cloudy:

Liq. bismuth. et ammon. cit. ...	3ss.
Tr. digital. ...	℥v.
Mucilag. ...	3j.
Aq. menth. pip. ad ...	3ss.

Ft. dose j. Mitte 3vj.

One-twelfth part twice a day.

[Compounded according to the prescription, the mixture, when newly made, is in appearance like whisky-and-water, but in a short time (an hour or thereby) it becomes cloudy and opaque, and remains in this state. The cloudiness is due to formation of insoluble acid-arabate of bismuth. A little more bismuth liquor (about 40 minims instead of 30 minims) supplies sufficient bismuth to form a normal and soluble bismuth arabate, which produces a clear mixture. The prescription mixture is so near the border-line that a very slight variation in the strength of the bismuth liquor or the acacia mucilage would make all the difference as to whether it is clear or cloudy. In a case of this sort, one is apt to assume that rendering the mixture alkaline will keep the bismuth in solution. Alkalis in this case, however, does no good.]

A Cachet Problem.

Pot. iodid. ...	gr. v.
Acid. aceto-salicylic ...	gr. vij.

M. Ft. pulv. in cachet.

Hygeia (254/55) says these cachets were dispensed for a man in Manchester, and he came back and complained that they had become spotted (reddish) after a few days, and at the same time told "Hygeia" that he had had them in Harrogate, and those had kept perfectly white. "Hygeia" told him that a chemical action had set up which would be helped along or retarded by atmospheric conditions, moisture, excess of ozone, etc. Another batch was made up and taken to Bridlington. Each one turned a reddish-brown colour and became soft and sloppy. Aspirin was also tried, but with the same result. [The reddish "spotting" is to be expected. The potassium iodide alone causes that. A very dry atmosphere or a thick cachet retards the spotting. We have kept cachets according to the prescription in a dry and in a moist atmosphere. Both became spotted after three or four days; neither, however, became sloppy or pasty. We put aside some of the material in ordinary powder-papers and in air-tight papers. All the papers became coloured, but the contents are comparatively dry and quite usable. The coloration can be lessened or entirely prevented by diluting the potassium iodide with a little inert absorbent powder before mixing with the aceto-salicylic acid. Triturate the iodide with 3 grains of powdered liquorice-root and mix lightly on a paper with the aceto-salicylic acid, then place in the cachet, which has been kept in a warm place for ten minutes or so to ensure dryness. Made in this way, there is, after a week in the moist atmosphere, just a faint appearance of spotting; in the dry atmosphere there is no coloration.]

Legal Queries.

Consult the legal information in "The Chemists' and Druggists' Diary," 1910, before writing about your difficulty.

Ipecacuanha (1/18).—The label for stomach and liver pills does not render them liable to medicine-stamp duty.

Snail (9/28).—Easton's syrup and Fellows's syrup are Part 2 poisons, therefore the purchasers of these do not require to be known to the retail vendors.

A. G. (5/17).—The Board of Customs and Excise has not altered the practice of the Board of Inland Revenue as regards the use of the title "Family Healing and Curative Ointment." The title is "non-dutiable."

Curious (1/51).—The provisions as to the sale of spirituous medicinal preparations do not extend to such compounds as perfumes and flavouring-extracts, for the sale of which the Revenue authorities do not require retailers to hold a spirit-licence.

S. L. (5/13).—"Anti-Nit Ointment, for killing vermin on the head," is not a medicine, and therefore not liable to stamp-duty, unless it is held out or recommended for human ailments. Your label does not make the ointment liable to duty, although your name is used in the possessive case.

Equity (6/57).—It is not the custom of the retail drug-trade to allow holidays to assistants until after twelve months' service; but it is unusual to interpret this rule so strictly as not to give the assistant any holiday during the first twelve

months. You cannot legally, however, compel your employer to give you a week-end, although it is unreasonable of him to refuse it.

Subscriber (11/52) asks if he is liable for the whole or any part of the salary of an assistant who has been for a short time in his employ, and is now absent for six weeks consequent upon an operation. [If the terms of employment are those customary in the retail drug-trade—namely, one month's notice on either side—"Subscriber" is probably liable until he gives such notice and it expires. There are no ruling cases to definitely decide the point.]

J. M. (250/67).—If a design is registered as a trade-mark, it is, until the contrary is proved, the property of the person who has registered it. If such person takes action against another who claims that he used the design for years prior to the registration, the latter person can move (if the case is taken into the Courts) that the mark should be removed from the register. This is rather an expensive process. Objections to the registration of trade-marks should be lodged when the applications are advertised.

Corn (10/39).—If the corn-plaster does not contain a scheduled poison it may be sold by general dealers without infringement of the Pharmacy Act; but general dealers cannot sell a plaster described as "Corn Plaster" without it being stamped according to the Medicine-stamp Acts. The exemption of known, admitted, and approved remedies from stamp-duty is only given when the sellers are chemists, or those who have served apprenticeships to chemists. Such a reference as "Formula No. 6337" placed on the label would not exempt a medicine; the reference must be to an approved book, and should be such as will enable anyone to find the formula without difficulty.

Wondering (4/9).—EXECUTOR UNDER WILL.—Our subscriber writes: "Jones makes a will and appoints his wife and a Mr. Smith as co-executrix and co-executor respectively. Shortly after Jones's death Smith gets Mrs. Jones to sign herself 'off' in order to enable him to appoint a male friend of the late Mr. Jones as his co-executor, which he does. Can Smith legally do this?" [It seems that Mrs. Jones and Mr. Smith were appointed executors and trustees of Jones's will, and that Mrs. Jones has renounced probate and disclaimed her trusteeship. Smith is then sole executor and trustee. He cannot appoint another executor, but he can legally appoint another trustee to act with him.]

Registered Chemist (257/42) puts the following question: "Can a drug-store proprietor who is not a registered chemist legally sell a preparation labelled 'Essence of Paregoric' (without opium). Dose, 10 to 30 drops' when paregoric is asked for?" [There have been several convictions under the Merchandise-marks Act in respect to similar transactions. It has been proved that paregoric is a preparation containing opium, and therefore that opium is an essential part of the preparation, so that the description "Essence of Paregoric" might be held as exaggerating the offence. It should, however, be noted that if the seller makes it clear to the purchaser before the transaction is completed wherein the article he gives differs from that demanded, the sale may be legal.]

E. G. (156/34).—INSURING ASSISTANTS.—"E. G." took out an employers' indemnity policy, in which he returned his assistant's total earnings at 80%. The assistant met with an accident, and has been confined to his bed for some weeks. The insurance company were notified, and gave instructions to pay the assistant 15s. per week. "E. G." asks whether he is not entitled to 30s. per week. [The insurance company, by the policy which "E. G." sends, agree to indemnify him against all claims under the various Acts dealing with workmen's compensation and employers' liability. The assistant is entitled, under the Workmen's Compensation Act, 1906, to receive half his wages while he is disabled by accident, and this is the amount which the insurance company are liable to pay the holder of the policy. The insurance company only indemnify "E. G." against the actual amount he has to pay his employé.]

A. H. L. (7/52) sends the following query: "Can a chemist appeal after the Licensing Justices have refused to grant him a wine or wine and spirit licence?" [If this is an application for a new licence, the Justices have an absolute discretion to refuse it, and no appeal lies from their refusal. If the application is for the renewal of a licence, and the Justices refuse to renew, there is a right of appeal to Quarter Sessions. Where the chemist who applies for the renewal of his retail "off" wine-licence or "off" wine and spirit licences was himself licensed to retail wine "off" or wine and spirits "off" in respect to the same premises on June 25, 1902, the renewal can only be refused to him on one of the four following grounds:

1. That he has failed to produce satisfactory evidence of good character; or, having previously held a licence, the licence was forfeited, and he was disqualified to hold one on conviction for some offence.
2. That the premises or some adjoining premises owned or occupied by the applicant are frequented by persons of bad character.
3. That the applicant, or the house, is not duly qualified as by law required.
4. That the applicant has been found by the Justices to have been in some way guilty of misconduct in the management of his licensed business, as by selling surreptitiously, concealing the nature of the goods sold, or the like.

A simple example of the last-named ground of objection would be the selling of wine and invoicing it as soda-water. But, as stated, an appeal lies in all cases against the refusal to renew.]

Miscellaneous Inquiries.

As we do not in this section repeat information given during the past twelve months, inquirers should refer to the copies mentioned. Back numbers for the past five years can generally be obtained from our office at the published prices.

Pater (259/50).—HYPERIDROSIS.—We presume that the foetid perspiration of which the young woman complains is general, and not localised to feet or armpits. The first indication in treatment is to attend to any defect in general health, especially anæmia. Many remedies have been vaunted for the external treatment of the condition, and the number of remedies is an indication of its obstinacy. We suggest first trying frequent hot baths with the use of formalin soap, allowing the latter to dry on, and if there is no obvious defect in health, giving a teaspoonful of confection of sulphur twice or three times a day.

Phenacite (258/25).—Your customer appears to be suffering from gleet—a chronic gonorrhœal infection of some of the urethral crypts. The facts you give are not sufficient upon which to found a diagnosis of syphilis: a syphilitic rash would be general, and would not be likely to clear up on anti-gonorrhœal treatment such as you prescribed. Hard lumps in the groin might quite well be caused by the urethral infection, and the glands are likely to remain palpable for the rest of life—indeed, in healthy people the inguinal glands are usually quite palpable; they only become more so in the case of urethral infections and of chancres. You had better leave the glands alone and prescribe a course of urotropin for the discharge; if this fails to cure, a course of urethral injections given by a doctor should be recommended. Venus and Bacchus must be banned.

W. D. (5/43).—SAMPLE OF WATER.—There is certainly a trace of iron present in the sample of water you send, but so little as to have no effect on its value as a drinking-water. But there are, however, other features which, if the analyses you send are correct, would cause the water to be regarded with suspicion. For example, 1.32 part per 100,000 of nitrogen as nitrates is equivalent to over 9 parts of potassium nitrate per 100,000. Is it possible that this figure should be 0.132? The presence of even a trace of nitrites is also very suspicious, and the fact that in the former analysis the albuminoid ammonia is 0.011 part per 100,000, and in the latter only 0.0028, would indicate so wide a variation in organic matter from time to time as to suggest intermittent contamination with surface water.

Sarina (235/70).—MENTHOL SNUFF.—The basis is milk-sugar. We suggest that you try the following formula, which will yield a product like your sample:

Menthol	...	...	...	...	3
Cocaine hydrochlor.	...	...	...	...	4
Boric acid	...	...	...	...	1
Sodium bicarbonate	...	...	...	...	3
Magnesium carbonate	...	...	...	...	3
Milk-sugar	...	...	...	...	25

Mix well.

Betol (2/62).—STOMACH-POWDER.—Your sample resembles Sir Andrew Clark's powder, which has the following composition:

Pulv. rhei	...	...	...	...	3j.
Sodii bicarbonatis	...	...	...	...	3ij.
Pulv. cinnamomi co.	...	...	...	...	3j.

Misce. Dose: 10 to 15 grains.

G. W. B. (2/7).—(1) NIT-DESTROYING OINTMENT.—Apart from the question of the desirability of using salicylic-acid ointment on a child's head, we do not think it will act as a parasiticide. It is better and safer to use an ointment containing extract of quassia, powdered quassia, extract of quillaia, or saponin. (2) GRIPE-WATER.—You will not be able to use liq.

magnesi carb. in the mixture if the product is to be kept more than a few days. It is better to employ sodii bicarb. as the alkali in children's gripe-water. This will correct any acidity that is causing discomfort. Reconstructed, your recipe would stand as follows:

Sodii bicarb.	...	...	...	3viij.
Ammon. brom.	...	...	...	3viij.
Ol. anethi	...	...	...	gtt. viij.
Ol. anisi	...	...	...	gtt. viij.
Sp. vini rectificat.	...	...	...	3j.
Syr. simplici	...	...	...	3v.
Aquam ad	...	...	...	3xx.

Misce.

Dose: For infants under six months, from half a teaspoonful to a teaspoonful; above that age and under two years, one to two or three teaspoonfuls; above two up to four years, a teaspoonful—three or four times a day, if required.

(3) DOSE OF GREY POWDER.—A dose of 1 grain of hydrargyrum cum creta for a child under six months is larger than usual, and is really no more efficacious as an alterative than $\frac{1}{8}$ or $\frac{1}{4}$ of a grain.

G. D. (3/6).—PRESERVING PEAS.—The method was last described in the *C. & D.*, August 28, 1909, p. 389.

T. R. C. (248/69).—PILE-REMEDY.—The sample you send is pilewort, or lesser celandine (*Ranunculus Ficaria*, Linn.), which has an established reputation as a cure for piles. Sir James Sawyer's formula for the ointment was given in the *C. & D.*, May 25, 1901, p. 831; but this was only a revival of an old remedy.

C. C. (258/35).—FLOOR-POLISHING.—The wood must be clean, and, if not oak, will probably need tinting. This is best done by incorporating some safflower or annatto with the size, which is next applied. When quite dry, the surface is dressed with beeswax and turpentine, the application being repeated a few times at intervals of a week.

Dens (256/62).—CALORIFIC FLUIDS have been largely employed for applying to the gums before extracting a tooth, but opinions are divided as to the painlessness. There are several recipes in "Pharmaceutical Formulas," of which the following is one:

Ether, pur.	...	...	...	3vj.
Menthol	...	...	...	3ss.
Ext. cannab. ind.	...	...	...	3iv.
Ol. menth. pip.	...	...	...	3j.

Misce.

Well dry the gums before applying cotton-wool saturated with the above fluid.

E. S. T. (Nova Scotia) (8/20).—We do not publish a book on pickling and sauce-making, although the subject is touched upon in our "Pharmaceutical Formulas." Information is also given in Brant's "Treatise on the Manufacture of Vinegar" (Low, Marston, 25s.) and Pacrette's "Art of Canning and Preserving" (Sprague Canning Machinery Co., 42 River Street, Chicago, 21s.).

R. H. (2/60).—The application of vinegar to hammered copper develops the verdigris and gives the antique appearance to the metal which you desire.

Hobson (251/43).—The regulations under the United States Food and Drugs Act, 1906, are given in the Appendix of "Pharmaceutical Formulas"; they are too lengthy to repeat here.

Mica (Johannesburg) (249/1).—The colour of the sample of mica you send is internal, and we do not think that any chemical treatment is likely to improve the appearance.

G. W. (4/67).—There is no dry method for making records in automatic recording-instruments that is so sensitive as inking methods, which, however, you bar. In barographs and telegraphic instruments ink is employed, the "pen" being usually a fine glass syphon. You do not indicate the nature of the instrument to which you are desiring to fit a recording-chart.

J. M. E. (256/56).—Sodium sulphite and potassium metasulphite slowly decompose when kept in solution. Potassium bromide would have no effect on the oxidation.

W. T. (2/58).—CLOTH-CLEANING BALLS have a basis of magnesia; the best-known variety is manufactured under a patent.

A. W. P. (241/58).—We cannot undertake the analysis of the sample of ointment.

G. Co. (3/63).—We must have full particulars of the sample before we consider whether it is to the general interest to have it analysed.

W. S. (New Zealand) (146/14).—Ringer's "Therapeutics" is out of print; the last edition is dated 1897.

J. H. S. (8/41).—The fungus infecting the floor of the house is dry-rot (*Mercurius lacrymans*, Fries.). The treatment is given in detail in Leaflet No. 113, which can be obtained free from the Board of Agriculture and Fisheries.

Synthetic (8/21).—BOOKS ON SYNTHETIC PERFUMES.—A list was given in the *C. & D.*, March 26, p. 494. You should also consult the chapters on the subject in "Pharmaceutical Formulas" and Parry's "Essential Oils and Perfumes."

E. B. (240/42).—(1) EMULSIO BISMUTHI ET SALOL:

Salol	...	...	...	gr. xx.
Pulv. tragac. co.	...	...	...	gr. xx.
Liq. bismuthi	...	...	...	3j.
Aq. dest. ad	...	...	...	3j.

Dose: 5ss. to 5j.

Other formulæ have been devised with tincture of tolu and acacia, in addition to tragacanth. (2) PINE DISINFECTANT.—The sample you send is made on the following lines:

Turpentine	...	...	...	5 gals.
Rosin spirit	...	...	...	1 gal.
Nut oil	...	...	...	$\frac{1}{2}$ gal.
Solution of ammonia (.880°)	...	...	...	4 lb.

Churn together until an emulsion is formed.

By partly oxidising the turpentine by passing moist air through it, and adding camphor and eucalyptus oil, the pine-odour can be intensified.

J. T. (137/13).—TIMBER-TONGUE IN CATTLE.—See reply to "J. McM."

A. R. B. (248/72).—(1) An odour resembling lemon oil is given to furniture-polish by the addition of citral, which is prepared from cheaper oils than lemon. (2) The boot and furniture polishes can be softened by employing more liquid—turpentine or water—according to the composition of the preparation.

J. R. H. (British Columbia) (256/32).—We will put you in communication with the writer of the note on salad-dressing.

Ammonia (1/5).—DRY-CLEANING LACE is managed with magnesia. The powder is brushed into the lace with a fairly stiff brush, and then removed by further brushing and shaking.

J. McM. (6/48).—ACTINOMYCOSIS IN CATTLE.—"Wooden" or "Timber" tongue is best treated without local applications. Iodine causes a hardening and thickening of the skin of the tongue, which aggravates the condition already existing. If the disease is not too far advanced, the administration of potassii iodidi and hyd. iod. rub. should be sufficient. The calf born while the cow was suffering from actinomycosis is more susceptible, but will not necessarily contract the disease. Periodic examination should be made of the mouth of the calf; but it is seldom that young calves are affected.

F. A. G. (157/2).—WARTS ON A MARE.—There are numerous means of removing warts from an animal, such as excision, ligature, and caustics—arsenic, corrosive sublimate in S.V.R., caustic potash or soda, argent. nit., and acetic acid. For internal warts calcined magnesia is gaining favour, but it is more usual to give pot. iodid. and hyd. per. rub., as prescribed in the treatment of actinomycosis.

H. S. B. (258/5).—SOLUBLE ESSENCES.—There is no book published on the manufacture of soluble essences for aerated-water makers, but the chapter on the subject in "Pharmaceutical Formulas" epitomises the matter.

Retrospect of Fifty Years Ago.

Reprints from "The Chemist and Druggist," August 15, 1860.

Businesses for Disposal.

(Advertisements.)

For Immediate Disposal, in consequence of the ill-health of the Proprietor, a Chymist's Business, situated in the best part of Brighton. Terms, Stock and Fixtures at a valuation. No Premium required. Address "Chymicus," Messrs. Evans, Lescher and Evans, Druggists, Bartholomew Close.

To be disposed of, in consequence of the Proprietor retiring from business, an old established Retail and Prescribing Business, in a populous district in London, realising a profit of between £400 and £500 per annum. A good introduction will be given. It is requested no one will apply who cannot command £1,000. Address and particulars will be given on application to Mr. Jacobson, No. 38, Walbrook, London, E.C.

[These advertisements sufficiently illustrate the kinds of businesses offered fifty years ago. Another in Nottingham, with returns 200%. a year, was offered for 40%.]

MISCELLANEOUS.

MCADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—300 Claudius Ash 5½ per cent. Preference, 22s. 3d.; 200 Baiss Bros. & Stevenson 5½ per cent. Preference, 18s. 3d.; 350 Ilford Ordinary, 14s. 10d.; 20 Brunner Mond, 101s. 9d.; 100 British Coalite, 7s. 9d.; 200 Wright, Layman & Umney Preference, 20s. 7½d.

WANTED (subject).—100 Camwal Preference, 5s.; 100 Bengers Ordinary, 29s. 6d.; 300 Idris "A" Preference, 3s. 6d., 200 "A" Ordinary, 2s. 3d.; £200 Debenture, 62; 25 A. J. White Preference, 10s. 9d., 300 Ordinary, 1s. 9d.; 200 C. Ash Ordinary, 28s. 6d.

List of shares for sale and wanted sent free on application Bankers, London County and Westminster. Established 1898.

SHOP FITTINGS.—Second-hand; excellent condition.—8-ft. glass-fronted Counter, 90s.; Dispensing-screen and Counter, 4 ft. 6 in. long, £5 10s.; 8-ft. handsome Wall-case, with drawers under, £9 10s.; quantity of labelled bottles, poisons and syrups, £3 10s.; Perfumery Case and Desk, 38s. 6d.; Counter-case, 3 ft. long, 30s., and various other bargains. PHILIP JOSEPHS & SONS, 93 Old Street, London, E.C.

THIS WILL INTEREST YOU.—We have just taken over the Business of Bygrave & Son, City Road, and have several second-hand Drug-fittings, Screens, Counters, Wall-cases, etc., for Sale, cheap, fine condition. Write or call, RUDDUCK & CO., 262 Old Street, E.C.

TO INCREASE YOUR PROFITS

should be every chemist's aim. I have devoted the last 4½ years to increasing chemists' profits throughout the world, with most gratifying results, as is shown by fact that 19 clients have paid my fee for a fifth year, and many others for a second or third year. Get my free booklet, read it and engage my services. Send postcard NOW.

BERNARD SLACK, 9 King Street, Tel. Wolverhampton, No. 681.

CHEAP LAND

FOR INDUSTRIAL PURPOSES

On the Elbe (Magdeburg).

For information, apply to the 'MAGISTRAT' (Municipal Council)

REAL HELP FOR PHARMACISTS.

A Pharmacist writes saying: "I have no hesitation in recommending you and your system to any Pharmacist. It is a great help, and the value of your services cannot be over-estimated." Booklet, "How to Increase Your Business," is sent post free to Pharmacists only on application. No cheap catchpenny methods, and only one Pharmacist in a town supplied with ideas.

BILLYARD ALLISON, Pharmacist & Business Specialist, RETFORD.

SIGHT TESTING.

If you would learn sight-testing quickly and at the same time be on the high road to obtain a Diploma, write to—

J. G. WALLBRIDGE, F.S.M.C.
Liverpool School of Optics,
227 KENSINGTON, LIVERPOOL.

GUMMED PRICE TICKETS

Crimson ground, white figures. Stocked in all usual prices up to 2½d., each price banded separately in hundreds.
— The Midget, 9d. per 1,000
— The Magnum, 1/6 per 1,000
each 1,000 assorted 10 different prices. Full illustrated list of blanks for use with these tickets free on application.

ODDLEY & CO., Ticket Writers & Printers, Holloway, London.



EXCHANGE COLUMN.

One halfpenny per word with name and address. One penny per word if we register the address and attach a number. No advertisement inserted for less than 6d.

FOR DISPOSAL.

BOOKS AND PERIODICALS.

MATRICULATION text-books; a few cheap. E. IVES LAWRENCE, Old Cross, Hertford.

MARTINDALE'S "Extra Pharmacopœia," 13th edition; practically new; unsold; what offers? JEFFREY, Pittville, Cheltenham.

SHARES.

SHARES for sale. See above.

MISCELLANEOUS.

EMPIRE bath-cabinet, new; cost 70s.; what offers? PARKER, Chemist, Coventry.

TYPEWRITER (Remington); practically new; only £13 13s. (maker's price £23); approval anywhere. F. E. WAX, Trowbridge, Wilts.

THREE handsome specie-jars with stands; 2 large pear-shape carboys with stands; ½-gal. tincture-press; 2 Y.G. percolators, and other utensils; what offers? SHEPHERD, 79 Grosvenor Road, Canonbury, London, N.

WANTED.

WANTED, a cash till, oil and syrup bottles. JACKLIN, Chemist, Hale, Cheshire.

MIXING machine. State maker, capacity, lowest price, WATSON, 90 Northgate, Gloucester.

WANTED, an air cushion or ring. State size and lowest price, 30/20, Office of this Paper.

LARGE iron mortar and pestle. Particulars, CUSSENS, SONS & CO., LTD., Kersal Vale, Manchester.

SHOW-CASE, dental or door; tablet-case, dental-engine, flasks, etc. "CHEMIST," 134 Fitzroy Avenue, Belfast.

MODERN window-enclosure, about 7 ft. high by 8 ft., and fittings; also 5-ft. and 9-ft. counters. GERRING, New Romney.

NEWTN'S "Inorganic," Southall's "Materia," Lowson's "Botany." Particulars, FAWCETT, 153 Cardigan Road, Leeds.

OPTICAL.—Wanted, cheapest trial-case. State terms, carriage forward, "L. O. S. L." (165/39), Office of this Paper.

OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.

TO BUYERS AND SELLERS.

We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

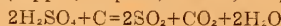
The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 6d. is charged by us on any transaction of 3l. or less, and 1s. if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

Corner for Students.

Summer Studies.

Pharmacopœial Notes.

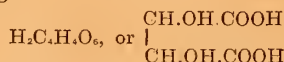
SULPHUROUS ACID is a strong solution of sulphur-dioxide gas in water containing 5 per cent. of sulphurous anhydride (SO_2) or 6.4 per cent. of sulphurous acid (H_2SO_3). The anhydride is prepared by heating sulphuric acid with a reducing-agent (copper, sulphur, carbon, etc.).—



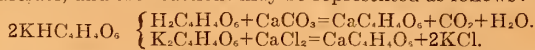
—or by burning sulphur or ore (such as iron pyrites) rich in sulphur. The gas is passed into water. Sulphur dioxide is now sold in liquid form in syphons, and the gas therefrom can be used to make the unstable acid. It loses strength both by volatilisation and by oxidation into sulphuric acid. The B.P. test for the presence of undue amounts of the latter depends upon the fact that barium sulphite, though insoluble in water, is soluble in the presence of the hydrochloric acid liberated, while barium sulphate is insoluble in both. In estimating the sulphurous acid with volumetric solution of iodine, it must be well diluted (with recently boiled and cooled water, to avoid oxidation), or made alkaline with sodium bicarbonate to obviate any reverse reaction which occurs in strong or acid solution. A better method is to add excess of volumetric iodine solution to the well-diluted acid, stand for five minutes, and titrate back with sodium thio-sulphate solution.

TANNIC ACID ($\text{C}_7\text{H}_{10}\text{O}_5$).—Galls contain two tannins, one of which is the official tannic acid or di-gallic acid, and the other is called gallo-tannic acid. The latter is a glucoside, and may be resolved into di-gallic acid and glucose. To prepare the acid the powdered galls are damped to induce incipient fermentation, which causes the glucose to be split off from the glucoside. At this stage commercial ether, with sufficient water to nearly saturate the ether, is added. After standing twenty-four hours the liquids are expressed, and the marc again exhausted with water-saturated ether. The expressed liquid is shaken with about one-fourth its volume of water, and, on standing, the mixture separates into a lower layer containing the water-soluble tannic acid and an ethereal layer retaining resins, fats, etc. The separated aqueous layer is evaporated at a low temperature, the residual tannic acid being purified by re-solution in water-saturated ether and repeating the separation and evaporation. The B.P. gives the formula of the acid as containing two molecules of water, but the B.P. Committee of Revision have accepted the anhydrous formula. The solubility of tannic acid is variable, owing usually to presence of the less soluble gallic acid. The presence of the latter may be detected by the pink or red coloration yielded when potassium-cyanide solution (5 per cent.) is added to the solution of the suspected sample. The term "tannin" is given to many astringent substances occurring in plants. Tannic acid is incompatible with many metals in solution and alkaloids, owing to its forming insoluble compounds of these substances.

TARTARIC ACID—



—is obtained from crude argol, the deposit formed during the fermentation of grape-juice. Argol consists of potassium acid tartrate admixed with some calcium tartrate and colouring-matters as impurities. To prepare tartaric acid from argol this substance is boiled with chalk and water until effervescence ceases, and then with calcium chloride to ensure that all the tartaric acid is present as calcium tartrate. Two molecules of cream of tartar may for purposes of illustration be considered equivalent to one molecule each of tartaric acid and potassium tartrate, and the reactions may be represented as follows:



The free acid reacts with the chalk, but effervescence ceases when all of it is in combination, and unless a soluble calcium salt (such as chloride) is added one half of the tartaric acid remains in solution as the potassium salt. The calcium tartrate produced is washed and digested with sulphuric acid to split off the tartaric acid as in preparing citric acid (*q.v.*). See also remarks under citric acid *re* lead and arsenic as impurities. Tartaric acid contains two asymmetric carbon atoms (see lactic acid), and accordingly possesses four physical isomerides, the dextro-acid being ordinary tartaric acid. The levorotatory acid and the racemic acid correspond to those mentioned under lactic acid, but the fourth one, meso-tartaric acid, is like racemic acid in being optically inactive, but differs from the latter in that it cannot be resolved into optical isomerides—i.e., it is internally compensated, while racemic acid (mixture of dextro- and levo-acids) is externally compensated.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," August 3, 1910.)

"VEGELOID"; for bottle caps and capsules (50). By Standard Tablet and Pill Co., Ltd., Hove, Sussex. 322,873.

"SOLMEDIA"; for dried bacteriological culture media (50). By F. R. Chopping, 137 West Green Road, London, N. 323,283.

(From the "Trade-marks Journal," August 10, 1910.)

"HEPOS"; for a liver-medicine (3). By Thos. Christy & Co., 4-10 Old Swan Lane, London, E.C. 323,281.

"MEROS"; for a sea-sickness remedy (3). By C. E. Godwin, Westbourne, Barnes Close, Winchester. 323,326.

"ERGAMINE"; for medicinal chemicals (3). By Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C. 324,681.

"ZORO"; for medicines (3). By T. Dykes, 65 West Regent Street, Glasgow. 324,821.

"SWASTIKA," and Greek key design; for medicinal chemicals (3). By W. Gossage & Sons, Ltd., Widnes, Lancs. 324,840.

"STRAMO"; for medicinal chemicals (3). By Reynolds & Branson, Ltd., 13 Briggate, Leeds. 324,985.

"KRONINE"; for beverages, syrups, essences, and cordials (42). By Jewsbury & Brown, Ardwick Green North, Manchester. 325,117.

"ORANA"; for mineral and aerated waters (44). By Stevenson & Howell, Ltd., 95A Southwark Street, London, S.E. 324,712.

"RUBINAT," and label designs; for a natural mineral water (44). By Arger & Cie., 135 Boulevard Sebastopol, Paris. 321,721.

"WITCH"; for soaps (47) and (43). By New Hydroleine Co., Ltd., Castle Soap-works, Ashby-de-la-Zouch. 324,043.

"KOMOPHILE"; for hair-preparations (43). By Emile & Cie., 24 Conduit Street, London, W. 322,415.

"DENTASOL"; for dentifrices (48). By Gudgeon Bros., 104 Heath Street, Hampstead. 322,669.

"DANDRAVOID"; for toilet-preparations (48). By A. Grundy, 9 Todd Street, Manchester. 324,548.

(From the "Trade-marks Journal," August 17, 1910.)

"BOROID"; for chemicals, plates, and films (1). By Benobor Syndicate, Ltd., Basterfield Street, Golden Lane, London, E.C. 325,013.

"KOPPOS"; for a veterinary medicine (2). By Harvey & Co. (Dublin), Ltd., 49 Lower Gardiner Street, Dublin. 324,753.

"VETZ," and centaur device; for veterinary ointment and embrocation (2). By Rubwel Co., 34 Seedley Road, Pendleton, Manchester. 324,482.

"VEGETINE"; for a pill (3). By David Macqueen Co., 12 Paternoster Row, London, E.C. 323,076.

Label device; for pills and ointment for piles (3). By David John, 12 Chapel Street, Troedyrhiw, near Merthyr Tydvil. 323,158.

"RAZIO"; for medicated air (3). By John Leach, 15 and 17 Great Bolton Street, Blackburn. 324,147.

"FRANZBRANNTEIN," and facsimile signature; for medicinal French brandy (3). By William Lee, 29 Anson Road, Cricklewood, N.W. 324,244.

"VITAFER"; for medicinal chemicals (3). By Southall Bros. & Barclay, Ltd., 19-21 Lower Priory, Birmingham. 324,675.

"SALRADO"; for medicine (3). By To-Kalon Mfg. Co., Ltd., 143-149 Great Portland Street, London, W. 324,752.

"MALTOSAN"; for medicinal chemicals (3). By A. Wander, 1 and 3 Leonard Street, London, E.C. 325,006.

"CHAPMAN'S SORE-THROAT CURE," and facsimile signature; for a medicinal preparation (3). By William Chapman, Belvedere Road, Bournemouth. 325,254.

"CHELMA"; for sensitised paper (39). By W. Cormack, 23 Dormer Place, Leamington. 325,460.

"MALTCON"; for malt foods (42). By John Bull Foods Syndicate, Ltd., 4 Amberley House, Norfolk Street, London, W.C. 323,679.

"FIZZO"; for liquid essences and extracts (42), and for mineral and aerated waters (44). By Duckworth & Co., Chester Road, Manchester. 324,260/1.